SONY SLV-E1000

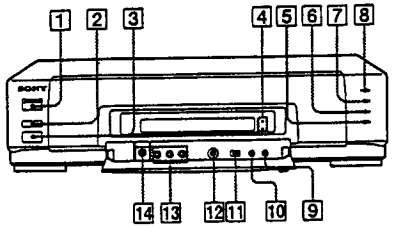
MODEL

USER MANUAL

Index to parts and controls

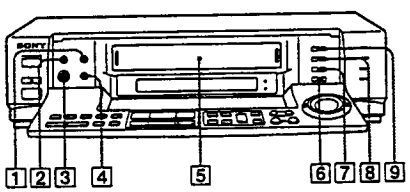
Refer to the pages indicated in ( ) for details.

Front panel, with cover closed



1 ON/STANDBY switch/indicator (11)
2 ⏏ EJECT button (24)
3 Remote sensor (7)
4 VIDEO INSERT/AUDIO INSERT indicators (52, 61)
5 VPS/PDC indicator (35)
6 TIMER REC indicator (32, 34, 37)
7 ● REC (recording) indicator
8 OPC indicator (42)
9 RF CHANNEL button (11)
10 EASY SET UP button (12)
11 COMMAND MODE selector (8)
12 LANC jack (47)
13 LINE IN 2 jacks (47, 57, 62)
14 MIC (microphone) jack (62)

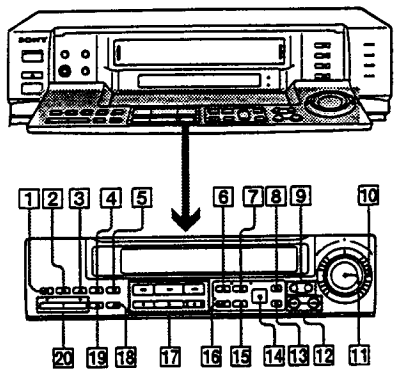
Front panel, with cover opened



1 REC LEVEL (recording level) control (27, 63)
2 REC BALANCE (recording balance) control (27)
3 PHONES jack
4 PHONE LEVEL control
5 Tape compartment
6 TAPE SELECT switch (26)
7 PICTURE selector (25)
8 NTSC PB switch (25)
9 COLOUR SYSTEM switch (25)

Index to parts and controls (continued)

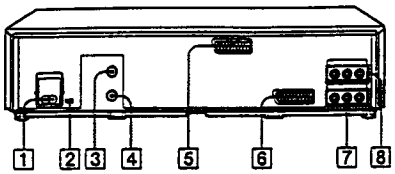
Front panel, with cover opened



1 TV/VTR button (29)
2 INPUT SELECT button (27, 49)
3 VPS/PDC (ON/OFF) button (35)
4 COUNTER RESET button (25, 51)
5 COUNTER/REMAIN button (26)
6 ASSEMBLE button (54)
7 EDIT STANDBY button (49)
8 EDIT button (49)
9 INDEX MARK/ERASE buttons (43)
10 SHUTTLE ring (50)
11 JOG dial (50)
12 ⏮ / ⏭ INDEX SEARCH buttons (43)
13 BACK button (54)
14 SYNCHRO EDIT/START button (49)
15 MARK button (54)
16 LANC REMOTE button (50)
17 Tape transport buttons
- ◀◀ REW (rewind) button (24, 40)
- ▷ PLAY button (24, 40, 51)
- ▶▶ FF (fast-forward) button (24)
- ■ STOP button (24, 27, 55)
- ❚❚ PAUSE button (24, 51)
- ● REC (record) button (27, 55)

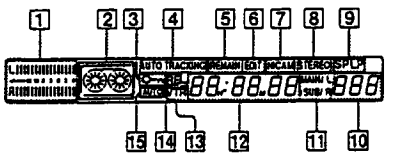
18 QUICK TIMER button (28)
19 TAPE SPEED (SP/LP) button (27, 49)
20 PROGRAM +/– buttons (11, 27)

Rear panel



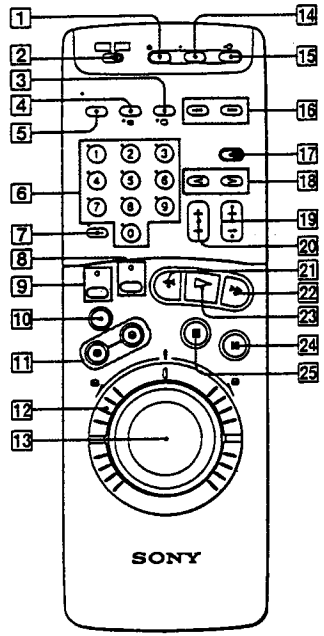
1 AC IN connector (6)
2 RF MODULATOR switch (6)
3 AERIAL OUT connector (6)
4 AERIAL IN connector (6)
5 EURO-AV (LINE IN 3) connector (57)
6 EURO-AV (LINE 1) connector (6)
7 LINE OUT 2 AUDIO/VIDEO jacks (6, 47, 57)
8 LINE IN 4 AUDIO/VIDEO jacks (57)

Display window



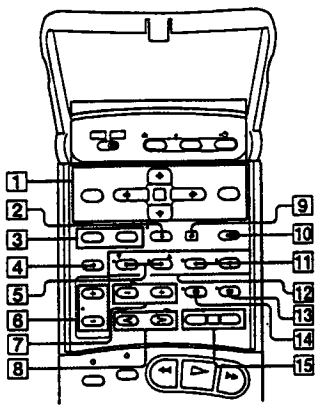
1 Peak level meters
2 Tape indicator (27)
3 Child lock indicator (10)
4 AUTO TRACKING indicator (42)
5 REMAIN indicator (26)
6 EDIT indicator (49)
7 NICAM indicator (29)
8 STEREO indicator (29)
9 Tape speed indicators (27)
10 Line/Programme position indicator (27)
11 Bilingual sound indicators (26, 30)
12 Linear time counter/Clock (15, 25)
13 VTR indicator (29)
14 RF indicator (11)
15 AUTO indicator

Remote commander (front, with cover closed)



1 ⏏ EJECT button (24)
2 TV/VTR remote control switch (7)
3 COUNTER/REMAIN button *(for VCR)* (26)
TV power on/TV mode select button *(for TV)* (7)
4 COUNTER RESET button *(for VCR)* (25)
Teletext button *(for TV)* (7)
5 AUDIO MONITOR button (26, 30)
6 Programme number buttons (27)
7 -/– (ten's digit) button (27)
8 PROG (programme) function button/indicator (27)
9 JOG/SHUTTLE function button/indicator (41)
10 SKIP button (40)
11 ⊖/⊕ SEARCH buttons (40)
12 SHUTTLE ring (24, 41)
13 JOG dial (24, 41)
14 TV/VTR button (29)
15 ⏻ (on/standby) button (12)
16 ⏮/⏭ INDEX SEARCH buttons (43)
17 COMMAND MODE selector (8)
18 SHUTTLE EDIT < > buttons
19 PROG (programme) +/– button (27)
/ Teletext page access button *(for TV)* (7)
20 VOL (volume) +/– button *(for TV only)* (7)
21 ◀◀ REW (rewind) button (24, 40)
22 ▶▶ FF (fast-forward) button (24, 40)
23 ▷ PLAY button (24)
24 ⏸ PAUSE button (24)
25 ■ STOP button (24, 27)

Remote commander (front, with cover opened)



1 Menu buttons (12, 16)
- MENU button
- CURSOR ↑/↓/←/→ buttons
- EXECUTE button

2 DISPLAY button (25)

3 INSERT AUDIO/VIDEO buttons (52, 60, 62)

4 TRACKING AUTO/MANU button (42)

5 ▼/▲TRACKING NORMAL/SLOW STILL ADJUST buttons (42)

6 PROG +/– buttons *(for VCR)* (27)
- (▲) / (▼) Teletext page access buttons *(for TV)* (7)

7 I► SLOW –/+ buttons (40)

8 ◄II /II► FRAME </> buttons (40)

9 TIMER CLEAR button (38)

10 COMMAND MODE selector (8)

11 INDEX MARK/ERASE buttons (43)

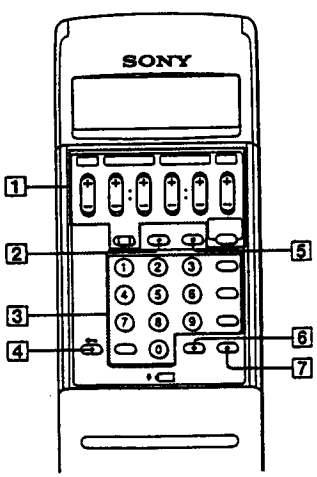
12 FASTEXT buttons *(for TV only)* (7)

13 INPUT SELECT button *(for VCR)* (49)
- TV mode select button *(for TV)* (7)

14 TAPE SPEED (SP/LP) button (27)
- Teletext button *(for TV)* (7)

15 ● REC buttons (27)

Remote commander (rear, with cover opened)



1 Timer recording/clock buttons (15, 31)
- DAY button
- START time buttons
- STOP time buttons
- PROG (programme position) button
- TRANSMIT button
- CLOCK SET button

2 TAPE SPEED button (31)

3 VIDEO Plus+ buttons (36)
- VIDEO Plus+ number buttons
- VIDEO Plus+ button
- ONCE button
- DAILY button
- WEEKLY button

4 (child lock) button (10)

5 INPUT SELECT button (34)

6 TIMER CHECK button (38)

7 TIMER CLEAR button (38)

Welcome!

Thank you for purchasing the Sony Video Cassette Recorder (VCR). Here are some of the features you'll enjoy with your VCR:

- EASY SET UP that guides you through necessary VCR setups sequentially through the TV screen
- JOG dial and SHUTTLE ring for easy search operations
- LANC jack to connect peripheral equipment such as a comcorder which can then be controlled by this VCR
- Optimum Picture Control (OPC) that automatically optimizes recording and playback performance
- Dynamic Signal Filter (DSF) that boosts and stabilizes signals
- Dual-sided remote commander for ease of operation
- VIDEO Plus+* system that lets you quickly and easily preset the VCR to record programmes
- RC (Rewritable Consumer)-Time Code reader that allows you high precision editing by connecting a camcorder equipped with RC-Time Code feature

* VIDEO Plus+ and PlusCode are Trademarks of Gemstar Development Corp. VIDEO Plus+ system is manufactured under licence from Gemstar Development Corporation.

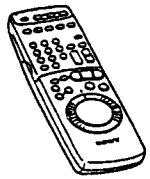
Compatible colour systems

This VCR is designed to record and play back using the PAL colour system. Recording of video sources based on other colour systems cannot be guaranteed.

Step 1 Unpacking

Check that you have the following items:

- **Remote commander**

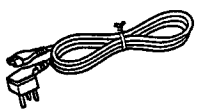


- **R6 (size AA) batteries**

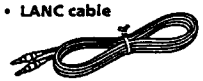
- **Aerial cable**

- **Audio/video cable**

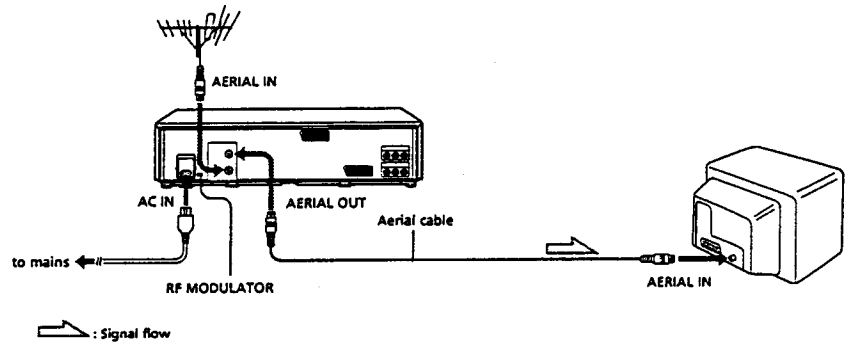
- **Mains lead**



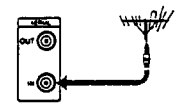
- **LANC cable**



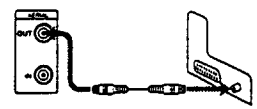
Step 2 Connecting the VCR



1 **Disconnect the aerial input cable from your TV and connect it to AERIAL IN of the VCR.**

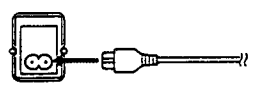


2 **Connect AERIAL OUT of the VCR and the aerial input of your TV using the supplied aerial cable.**



3 **Set the RF MODULATOR switch to ON.**

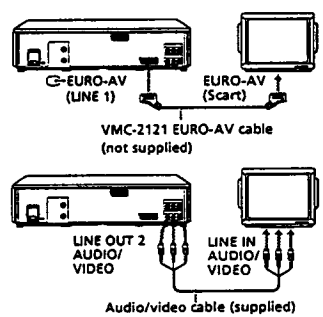
4 **Connect AC IN of the VCR and the mains supply using the mains lead.**
You've completed the basic hookup to watch and record TV programmes.



Additional connections

To a TV that has a EURO-AV (Scart) connector
This additional connection can improve picture and sound quality. Connect to the TV as shown on the right.

To a TV that has phono-type audio/video input jacks
This additional connection can improve picture and sound quality. Connect to the TV as shown on the right.

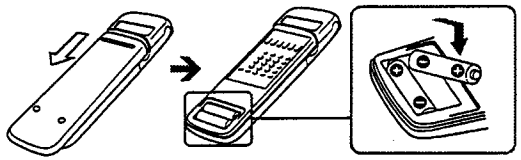


Tip

- When the TV is connected to the EURO-AV (LINE 1) connector or LINE OUT 2 AUDIO/VIDEO jacks, setting the RF MODULATOR switch to OFF is recommended. In the OFF position, only the signal from the aerial is output through the AERIAL OUT connector.

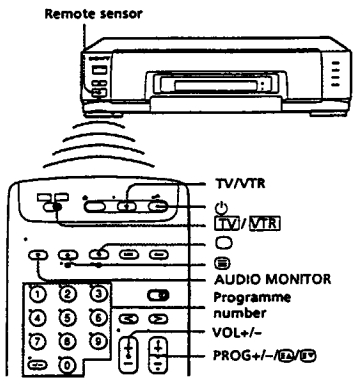
Step 3 Setting up the remote commander

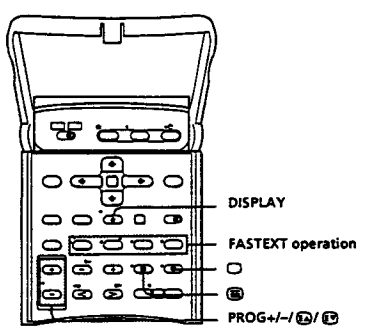
Insert two R6 (size AA) batteries by matching the + and – on the batteries to the diagram inside the battery compartment.



Using the remote commander

You can use this remote commander to operate this VCR and a Sony TV. Buttons on the remote commander marked with a dot (•) can be used to operate your TV.





To operate	Set TV/VTR to
the VCR	VTR and point at the remote sensor on the VCR
a Sony TV	TV and point at the remote sensor on the TV

TV control buttons

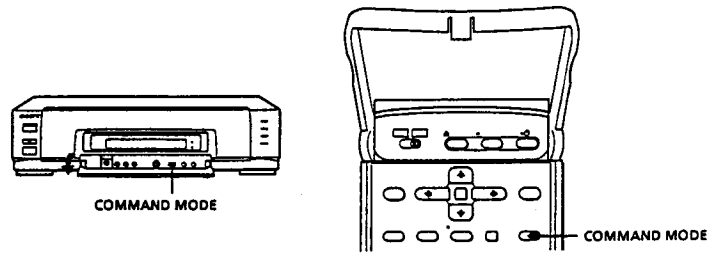
To	Press
Turn the TV into standby	⏻
Select an input source of the TV either from aerial in or from line in	TV/VTR
Select the programme position of the TV	Programme number
Switch to TV mode (Teletext off)	▢ (TV power/mode select)
Switch to Teletext mode	▣ (Teletext)
Change the programme position of the TV	PROG +/–
Increase (+) or decrease (–) the volume of the TV	VOL +/–
Select the sound	AUDIO MONITOR
Use FASTEXT	FASTEXT operation
Get on-screen display	DISPLAY
Change the Teletext page	/

Notes

- With normal use, the batteries should last for approximately three to six months. When battery power gets low, the symbol appears in the remote commander display.
- If you do not use the remote commander for an extended period of time, remove the batteries to avoid possible damage from battery leakage.
- Do not use a new battery with an old one.
- Do not use different types of batteries.

Controlling this VCR and other Sony video equipment separately

You can select three different positions for the command mode setting to avoid having this VCR and the other video equipment functioning simultaneously.



If other Sony video equipment has a COMMAND MODE selector

1 Set the COMMAND MODE VTR 1/2/3 selector on the remote commander to a position other than the one you selected for the other video equipment.
2 Set the COMMAND MODE selector on this VCR to the same position you selected in step 1.

If other Sony video equipment does not have a COMMAND MODE selector

The command modes of the video equipment are determined according to the VCR format. To control the other video equipment, set the COMMAND MODE VTR 1/2/3 selector on the remote commander as follows:

Video equipment	Set COMMAND MODE VTR 1/2/3 to
Infrared remote controlled Sony Betamax VCRs	1*
Sony 8 mm format VCRs	2
Sony VHS format VCRs	3

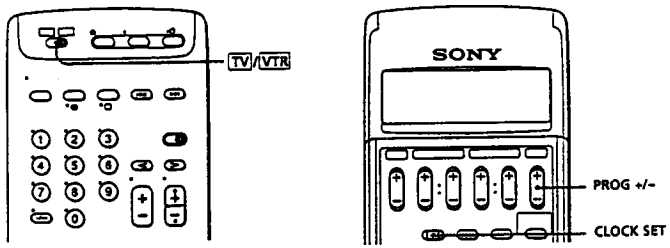
* Some units may not be controlled in this mode.

Note

- If you set the COMMAND MODE VTR OFF/1/2/3 selector on the VCR to "OFF," you can no longer control this VCR from any other Sony remote commanders.

Controlling other TVs

The remote commander is preprogrammed to control non-Sony TVs. If your TV is listed in the table below, set the appropriate manufacturer's code number.



1 Set the TV/VTR switch on the top of the remote commander to TV.
2 Slide down the back cover of the remote commander.
3 While holding down CLOCK SET, press PROG +/– to select your TV's code number(s) in the remote commander display.
Now you can use the TV control buttons to control your TV.

Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the code number that works with your TV.

Manufacturer	Code number	Manufacturer	Code number
Sony	01	Nokia (ITT)	16
Philips	06, 07, 08	Panasonic	17, 49
Grundig	10, 11	Telefunken	36

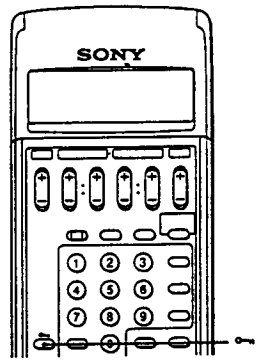
Notes

- If the TV uses a different remote control system from the one preprogrammed to work with the VCR, you cannot control your TV with the remote commander.
- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote commander, the code number automatically resets to 01 (Sony). Reset the appropriate code number.

Step 3 Setting up the remote commander (continued)

Disabling all the controls/buttons (Child lock function)

To avoid inadvertent operation, you can disable all the controls and buttons on the VCR and on the remote commander.



Slide down the back cover of the remote commander and press 🔑 for a few seconds

The 🔑 indicator appears in the display window of the VCR and all the controls and buttons are disabled. If you press a button, a beep sounds and the 🔑 indicator blinks.

To cancel the disabled condition

Keep 🔑 pressed for a few seconds until the 🔑 indicator disappears.

Tip

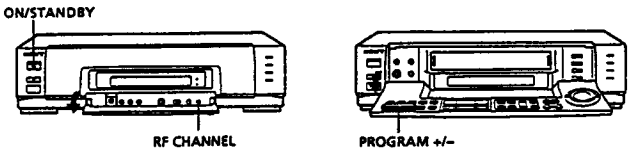
- To cancel the disabled condition when you do not have the remote commander at hand, disconnect the mains lead from the mains supply and connect it again.

Note

- The slide switches and rotary controls (except JOG/SHUTTLE) on the VCR cannot be disabled with this function.

Step 4 Tuning the TV to your VCR

If you have connected the VCR to your TV using the EURO-AV cable, skip this step.

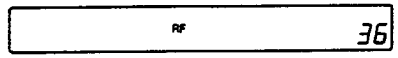


1 ON/STANDBY

Press ON/STANDBY to turn on the VCR.

2 RF CHANNEL

Press RF CHANNEL on the VCR.
The factory-preset RF channel appears in the display window.
The VCR signal is output through this channel to the TV.



3 **Turn on your TV and select a programme position for video playback.**

4 **Tune the TV to the same channel as that shown in the display window so that the picture on the right appears on the TV screen.**
Refer to your TV manual for tuning instructions.
If the picture does not appear clearly, see "To obtain a clear picture from the VCR" below.

5 RF CHANNEL

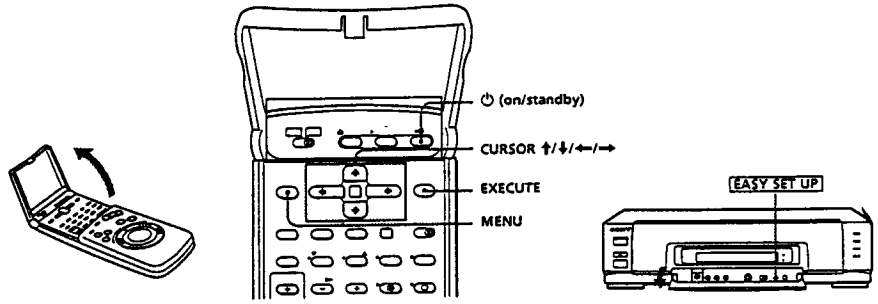
Press RF CHANNEL.
You have now tuned your TV to the VCR. Whenever you play a tape, set the TV to the programme position selected in step 3 above.

To check to see if the TV tuning is correct
Select the programme position for video playback on the TV and press PROGRAM +/–. If the TV screen changes to a different programme each time you press PROGRAM +/–, the TV tuning is correct.

To obtain a clear picture from the VCR
If the picture does not appear clearly in step 4 above, press PROGRAM +/– in step 4, while the RF channel is displayed, so that another RF channel appears. Then tune the TV to the new RF channel until a clear picture appears.

Step 5 Setting up the VCR sequentially (EASY SET UP)

Before using the VCR for the first time, set up the VCR using the EASY SET UP function. With this function, you can set the language for the on-screen display, TV channels, guide channels for VIDEO Plus+, and the clock, guided by the sequence indicated on the TV screen.



1 •⏻

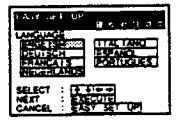
Press ⏻ (on/standby) to turn on the VCR.

2 **Turn on your TV and select a programme position for video playback.**

3 EASY SET UP

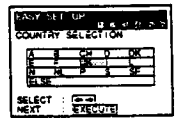
Press EASY SET UP on the VCR.
The language select menu appears on the TV screen.

To cancel starting the EASY SET UP function, press EASY SET UP.



4 CURSOR / EXECUTE

Press CURSOR ↑/↓/←/→ to highlight the desired on-screen display language, then press EXECUTE.
The country abbreviations for ITP (Intelligent Tuner Preset) appear.



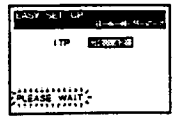
Step 5 Setting up the VCR sequentially (EASY SET UP) (continued)

5

CURSOR

EXECUTE

Press CURSOR ←/→ to highlight the abbreviation of your country, then press EXECUTE.
ITP starts searching for all the receivable channels.
ITP sorts the located channels appropriately for the selected country and presets them to the programme positions. Some VIDEO Plus+ guide channels and station IDs may also be preset if ITP can detect them.
During presetting, the channel being located is displayed on the TV screen.

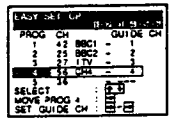


The abbreviations of the countries are as follows:

A:	Austria	I:	Italy
B:	Belgium	L:	Luxemburg
CH:	Switzerland	N:	Norway
D:	Germany	NL:	Netherlands
DK:	Denmark	P:	Portugal
E:	Spain	S:	Sweden
F:	France	SF:	Finland
UK:	United Kingdom	ELSE:	other countries

If your country does not appear, select ELSE.

When all the channels are preset, the following screen appears.



If necessary, you can add or disable the channels manually.
See "Tuning the VCR to TV channels manually" on page 19.

Note
- Do not exit EASY SET UP while ITP is presetting channels. If you do, repeat EASY SET UP from the beginning.

6

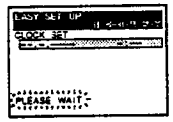
CURSOR

Using CURSOR ↑/↓/←/→, set the VIDEO Plus+ guide channels that could not be preset automatically, and change the programme positions of the stations. (If not necessary, skip this step.)
The setting procedures are the same as those described in "Setting up VIDEO Plus+ manually" on page 21 and "Changing the programme positions of the stations" on page 23.

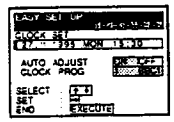
7

EXECUTE

Press EXECUTE.
Auto Clock Set starts searching for a TV station that carries the time signal and sets the clock time automatically. The date is also set if the date data is transmitted from the TV station.



When the clock setting is completed, the following screen appears. If the VCR does not receive the time signal from any station, "1.1. 1995 SUN 0:00" appears and AUTO ADJUST is set to OFF.



(continued)

Step 5 Setting up the VCR sequentially (EASY SET UP) (continued)

8

CURSOR

If necessary, adjust the date and/or time manually and change the station for Auto Clock Set using CURSOR ↑/↓/←/→.
The setting procedures are the same as those described in "Setting the clock manually" on page 17.

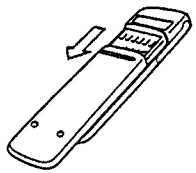
9

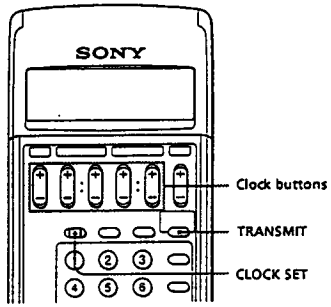
EXECUTE

Press EXECUTE to finish the EASY SET UP operation.
A programme position appears on the TV screen.
The station ID may also appear if the VCR has detected it.

Step 6 Setting the clock on the remote commander

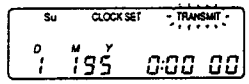
You must set the clock on the remote commander for programming the timer recording. To set the clock, you may use the clock in the VCR display window which you have set in the EASY SET UP procedure.





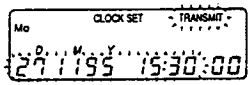
1 CLOCK SET

Slide down the back cover of the remote commander, and press CLOCK SET.
The words "CLOCK SET" appear in the remote commander display.



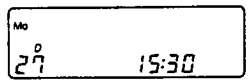
2 DAY START STOP D H M H M

Press the clock buttons until the current time and date appear.
To set the current time and date, press DAY D +/– for the date, START H +/– for the month, START M +/– for the year, STOP H +/– for the hour, and STOP M +/– for the minutes. You can make the settings in any order.
To cycle backwards, press the minus (–) side of the buttons.
The day of the week is set automatically.



3 CLOCK SET

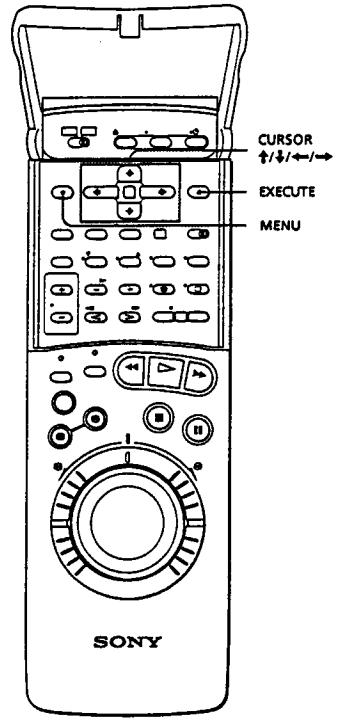
Press CLOCK SET.
The remote commander display shows the time and date.



Setting the VCR clock using the clock on the remote commander
If the VCR clock is wrong due to a power failure, etc., press TRANSMIT on the remote commander. The clock data on the remote commander is transmitted to the VCR.

Note
- If AUTO ADJUST in the CLOCK SET menu is set to ON, the VCR clock is readjusted automatically by the time signal from the TV station. Therefore, if the clock on the remote commander transmitted to the VCR is not correct, the two clocks may show different times.

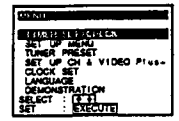
Selecting a language manually



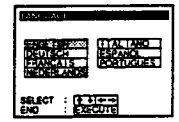
Tip
- To demonstrate the main features of the VCR on the TV screen, select DEMONSTRATION in the main MENU and press EXECUTE.
To stop the demonstration, press MENU.

If you prefer other on-screen display language to English, you can change it using the menu.

1 Lift the cover of the remote commander, and press MENU.
The main MENU appears on the TV screen.

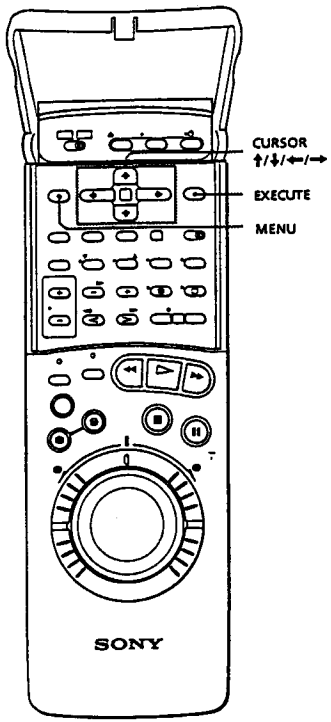


2 Press CURSOR ↑/↓ to move the cursor (▮) to LANGUAGE, then press EXECUTE.
The language select menu appears.



3 Press CURSOR ↑/↓/←/→ to highlight the desired language, then press EXECUTE.

Setting the clock manually



Note

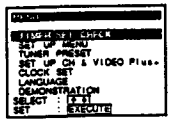
- The menu disappears automatically if you don't proceed for more than a few minutes.

Tip

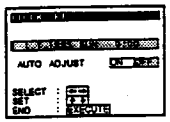
- To change the digits during setting, press CURSOR ← to return to the item to be changed, and select the digits using CURSOR ↑/↓.

You must set the time and date on the VCR to be able to use the timer recording features properly. You can set the VCR clock using the menu.

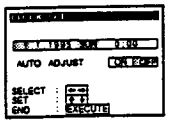
1 Lift the cover of the remote commander, and press MENU.
The main MENU appears on the TV screen.



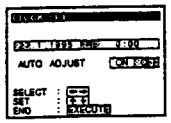
2 Press CURSOR ↑/↓ to move the cursor (▮) to CLOCK SET, then press EXECUTE.
The CLOCK SET menu appears.



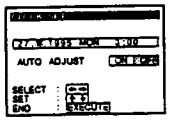
3 Press CURSOR → to highlight the day and the day of the week.



4 Press CURSOR ↑/↓ to set the day.
The day of the week is set automatically.



5 Press CURSOR → to highlight the month and set the month using CURSOR ↑/↓.



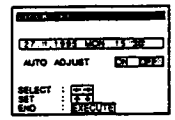
(continued)

Setting the clock manually (continued)

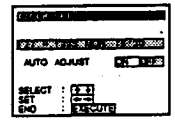
Tip

- If you set AUTO ADJUST to ON, the Auto Clock Set is activated whenever the VCR is turned off. The date and time is adjusted automatically by making reference to the time signal from the station whose programme position is displayed in the "CLOCK PROG" row.
If you do not need the Auto Clock Set, highlight OFF.

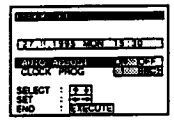
6 Set the year, hour and minutes in sequence, using CURSOR → to highlight the item to be set, and CURSOR ↑/↓ to select the digits.



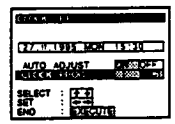
7 Press CURSOR → to confirm the setting.
The cursor (▮) appears in the leftmost column.



8 Press CURSOR ↓ to move the cursor (▮) to AUTO ADJUST, then press CURSOR ←/→ to highlight ON.

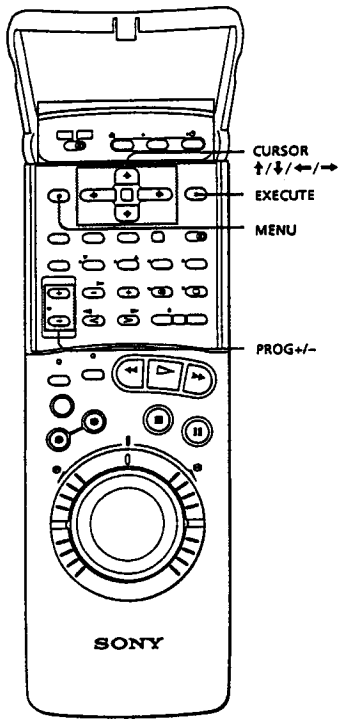


9 Press CURSOR ↓ to move the cursor (▮) to CLOCK PROG, then press CURSOR ←/→ repeatedly until the programme position of the station that carries the time signal appears.
If the VCR does not receive the time signal from any station, AUTO ADJUST returns to OFF automatically.



10 Press EXECUTE to start the clock.

Tuning the VCR to TV channels manually



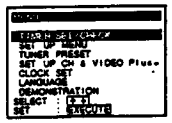
Notes

- The menu disappears automatically if you don't proceed for more than a few minutes.
- The station IDs aren't preset in manual tuning.

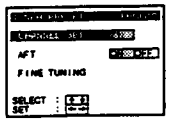
You may have preset the receivable channels in your area in the EASY SET UP procedure (page 12). If some channels could not be preset automatically, you can preset them manually; if there are unwanted channels among the preset ones, you can disable the channels.

Presetting channels manually

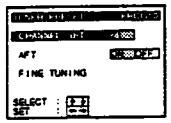
1 Lift the cover of the remote commander, and press MENU.
The main MENU appears on the TV screen.



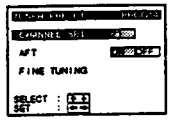
2 Press CURSOR ↑/↓ to move the cursor (▮) to TUNER PRESET, then press EXECUTE.
The TUNER PRESET menu appears.



3 Press CURSOR ↑/↓ to move the cursor (▮) to CHANNEL SET.



4 Press PROG +/– to select the programme position.



(continued)

Tuning the VCR to TV channels manually (continued)

5 Press CURSOR → to start tuning.
The VCR starts searching for a channel and displays the first one it finds on the TV screen. Press CURSOR ←/→ repeatedly until the channel you want is displayed.
The channels are scanned in the following order:
UHF B21 - B69

If you know the number of the channel you want, press the programme number buttons. For example, for channel 43, first press "4" and then press "3."

6 To allocate another channel to another programme position, repeat steps 4 and 5.
7 Press EXECUTE to store all the allocated channels.

Disabling unwanted programme positions

After tuning the TV channels, you can disable unused programme positions. The disabled positions will be skipped later when you press the PROG +/– buttons.

1 Press MENU, then select TUNER PRESET and press EXECUTE.
2 Select CHANNEL SET.
3 Press PROG +/– until the programme position you want to disable appears beside "PROG" on the TV screen.
4 Press programme number button "0" twice to display the number "0" beside CHANNEL SET.
5 Repeat steps 3 and 4 for other positions you want to disable.
6 Press EXECUTE.

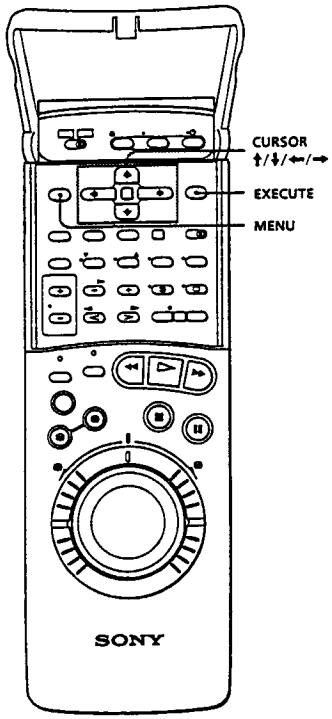
If the picture is not clear

Normally, the Auto Fine Tuning (AFT) function automatically tunes in channels clearly. If, however, the picture is not clear, you may also use the manual tuning function.

1 Press PROG +/– to select the programme number for which you cannot obtain a clear picture.
2 Press MENU, then select TUNER PRESET and press EXECUTE.
3 Select FINE TUNING. The fine tuning meter appears.

4 Press CURSOR ←/→ to get a clearer picture, then press EXECUTE.
Note that the AFT (Auto Fine Tuning) setting switches to OFF.

Setting up VIDEO Plus+ manually



Note
- The menu disappears automatically if you don't proceed for more than a few minutes.

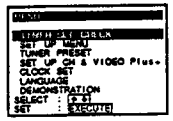
VIDEO Plus+ is a feature in Sony VCRs that simplifies the task of programming the VCR to make timer recordings.

How VIDEO Plus+ works
Whenever you want to record a TV programme, all you need to do is look up the programme's "PlusCode," a number assigned to each programme that's published in TV guide magazines. Then, just enter the PlusCode of the programme you want and the VCR is automatically programmed to record that show. It's that simple. With VIDEO Plus+, you no longer have to go through a lengthy and often repetitive procedure when you set start and stop times, channel numbers, and dates. All this information is automatically sent to your VCR when you enter the programme's PlusCode.

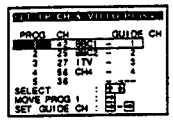
- If you want to record satellite broadcasts using VIDEO Plus+, see page 22.

Setting the guide channels

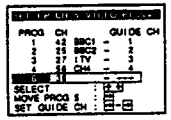
1 Lift the cover of the remote commander, and press MENU.
The main MENU appears on the TV screen.



2 Press CURSOR ↑/↓ to move the cursor (▮) to SET UP CH & VIDEO Plus+, then press EXECUTE.
The SET UP CH & VIDEO Plus+ menu appears.
The preset channels are displayed on the screen. The station IDs and guide channels also appear if the VCR detected them in EASY SET UP. "—" in the GUIDE CH column means that the guide channel has not been preset.

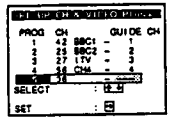


3 Press CURSOR ↑/↓ to move the cursor (▮) to the row on which you want to set the guide channel.
To display other pages for programme positions 6 to 60, press CURSOR ↑/↓ repeatedly.



4 Press CURSOR → to highlight the TV channel and guide channel.

5 Press CURSOR → to highlight the guide channel only.

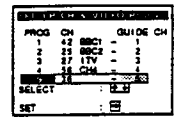


Setting up VIDEO Plus+ manually (continued)

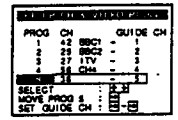
Notes
- If you use a satellite tuner connected via the EURO-AV (LINE 1) (Scart) connector, leave the GUIDE CH column blank (—). If you inadvertently entered a guide channel number, press CURSOR ↑/↓ repeatedly to reset the "GUIDE CH" column to "—". "—" appears between 1 and 255.
- If you use a satellite tuner connected to the other LINE IN jacks, select the addressed input on the TIME SET/CHECK menu. See "Checking/changing/cancelling timer settings" on page 38.
- The VCR does not allow entering the guide channel number, if the same number has been set.

Note
- When you record a satellite broadcast using VIDEO Plus+, you need to select the desired channel on the satellite tuner manually.

6 Press CURSOR ↑/↓ to select the guide channel number assigned in the programme guide.



7 Press CURSOR → to confirm the setting.
The cursor (▮) appears in the leftmost column.



8 To set the guide channel of another station, repeat steps 3 to 7.
If you want to change the programme positions of the stations, proceed to step 2 of "Changing the programme positions of the stations" on page 23.
9 When you've finished, press EXECUTE to exit.

Setting up VIDEO Plus+ for satellite broadcasts

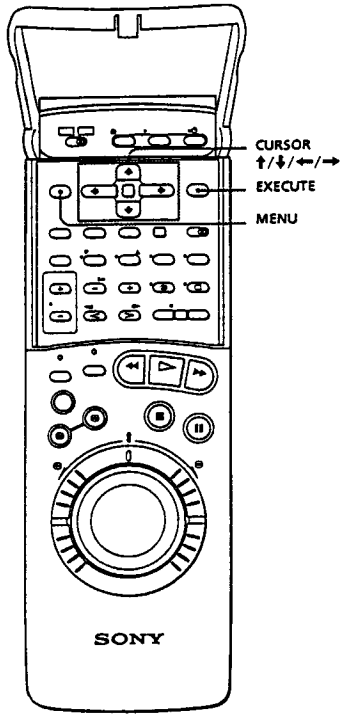
When your satellite tuner is connected via the AERIAL IN connector or LINE IN jacks, first you have to set the programme position for each satellite channel using the TUNER PRESET menu. Then set the guide channel number for each satellite channel using the SET UP CH & VIDEO Plus+ menu.

If your satellite tuner is connected via the EURO-AV (Scart) connector or LINE IN jacks, you don't have to set programme positions nor guide channel numbers for satellite channels. Skip the following operations.

1 Turn on the satellite tuner.
2 Press MENU, then select TUNER PRESET and press EXECUTE.
3 Press PROG +/– to select a programme position you want to use for watching a satellite channel.
4 Select CHANNEL SET, then press CURSOR → to tune the VCR to the satellite tuner.
The channel number displayed beside CHANNEL SET is used for receiving all satellite broadcasts from the satellite tuner.

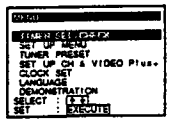
5 Press PROG +/– to select another programme position for another satellite channel, and press the programme number buttons to enter the same channel number as the one displayed in step 4.
Repeat this step for all satellite channels.
6 Set the guide channel number for each programme position assigned to the satellite channel, following the procedures in "Setting the guide channels" on pages 21 and 22.

Changing the programme positions of the stations

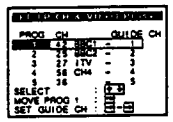


After setting the channels and VIDEO Plus+ guide channels, you can change the programme positions which are automatically assigned, as you like.

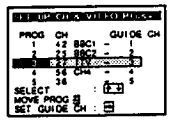
1 Lift the cover of the remote commander, and press MENU.
The main MENU appears on the TV screen.



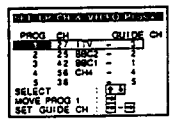
2 Press CURSOR ↑/↓ to move the cursor (▮) to SET UP CH & VIDEO Plus+, then press EXECUTE.
The SET UP CH & VIDEO Plus+ menu appears.



3 Press CURSOR ↑/↓ to move the cursor (▮) to the row on which you want to change the programme position, then press CURSOR →.
The TV channel and guide channel are highlighted.
To display other pages for programme positions 6 to 60, press CURSOR ↑/↓ repeatedly.



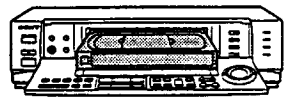
4 Press CURSOR ↑/↓ until the channel and guide channel row moves to the desired programme position, then press CURSOR ←.
The two rows exchange the positions.

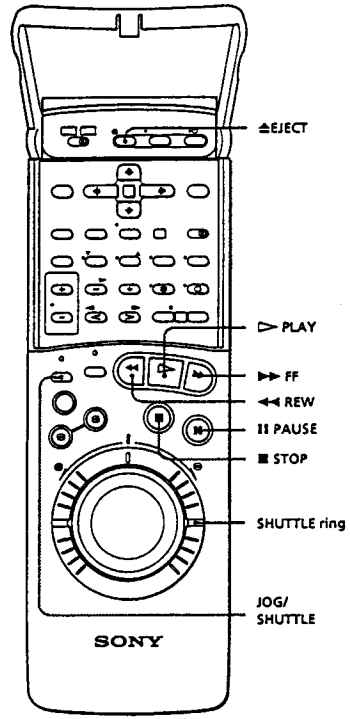


5 To change the programme position of another station, repeat steps 3 and 4.
6 When you've finished, press EXECUTE to exit.

Basic Operations

Playing a tape





Tip
- For further information on searching and playback functions, see "Playing/ searching at various speeds" on page 40.

This section shows you how to play back a video tape.

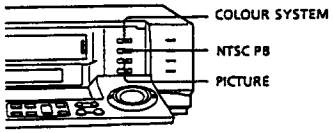
1 Turn on your TV and tune in to the VCR:
- If the TV is connected to the VCR using the EURO-AV cable, set the TV to video input.
- If the TV is connected to the VCR using only the aerial cable, set the TV to the programme position for the VCR.

2 Open the drop down panel and insert a tape.
The VCR turns on automatically. The tape starts playing automatically if its safety tab has been removed. (See page 30.)

3 Press ▷ PLAY to start playing.
When the tape reaches the end, the VCR automatically rewinds it to the beginning. (The power remains on.)

Additional tasks

To	Press
Stop play	■ STOP
Pause play	II PAUSE
Resume play after pause	II PAUSE or ▷ PLAY
Search forward	▶▶ FF during playback
Search backward	◀◀ REW during playback
Fast-forward the tape	▶▶ FF during stop
Rewind the tape	◀◀ REW during stop
Eject the tape	≙ EJECT



To adjust the sharpness of the playback picture

Set the PICTURE selector on the VCR to SHARP to get a sharp picture, or to SOFT for a soft picture. (The normal setting is NORMAL.)

To set the colour system

If streaks appear during playback, set the COLOUR SYSTEM switch on the VCR to conform to the system that the tape was recorded in. (The normal setting is AUTO.)

When your tape was recorded in	Set COLOUR SYSTEM to
PAL	PAL
NTSC	NTSC

To play an NTSC-recorded tape

Set the NTSC PB switch on the VCR according to the colour system of your TV.

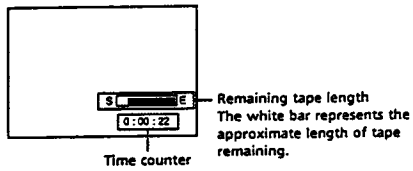
When your TV is	Set NTSC PB to
PAL	ON PAL TV
NTSC4.43	NTSC4.43

Notes

- Depending on your TV, the following may occur while playing an NTSC-recorded tape:
  - The picture becomes black and white.
  - The picture shakes.
  - No picture appears on the TV screen.
  - Black streaks appear horizontally on the TV screen.
  - The colour density increases or decreases.
- If you play back a tape recorded in LP or EP mode with NTSC system, the sound is heard in monaural.

Displaying the remaining tape length and time counter

Press DISPLAY to turn the display on or off.



Using the time counter

At the point on a tape that you want to find later, press COUNTER RESET to reset the counter to "0H00M00S." When you rewind or advance the tape to this point, refer to the counter.

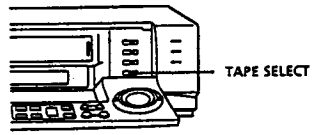
Notes

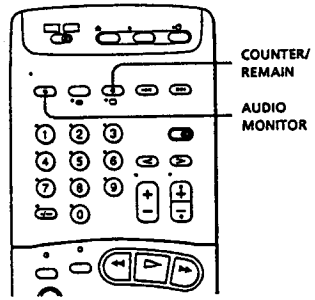
- When a tape is reinserted, the counter returns to "0H00M00S."
- The counter will not work on tape portions with no recording.
- If a tape has portions recorded in both PAL and NTSC systems, the time counter reading will not be correct. This discrepancy is due to the difference between the counting cycles of the two video systems.
- The display will not appear during still mode or slow-motion playback.

Playing a tape (continued)

Notes

- When you insert a tape with a short tape length such as E-30 or a non-standard commercially available tape, the remaining tape counter may not be correct.
- The remaining tape counter doesn't work for an NTSC-recorded tape. "-:--" appears in the display window.
- The display will not appear during still mode or slow-motion playback.
- The remaining tape counter is intended for rough measurement only.
- The remaining time will be displayed about 30 seconds after the tape is inserted.



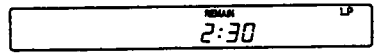


Notes

- When you play a tape recorded in monaural, the sound is heard in monaural regardless of the AUDIO MONITOR setting.
- To play a tape in stereo, you must use the EURO-AV connection or AUDIO OUT connection.
- If AUDIO MIX in the SET UP MENU is set to ON, the AUDIO MONITOR button doesn't work.

Displaying the remaining tape counter

Press COUNTER/REMAIN to display the remaining tape counter in the display window. To display it on the TV screen, press DISPLAY to turn the display on, then press COUNTER/REMAIN. Each time you press COUNTER/REMAIN, the time counter and the remaining tape counter appear alternately.



When you use the tape with more than 3-hour recording, open the drop down panel on the VCR and set TAPE SELECT according to the tape type.

Tape type	Set TAPE SELECT to
E-300	E300
E-240/E-260	E240
E-195 or less	E195

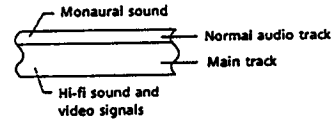
Playing stereo and bilingual programmes

Press AUDIO MONITOR to select the desired sound. Each press of the button changes the display on the VCR and TV screen.

To listen to a		Press AUDIO MONITOR until	
Stereo tape	Bilingual tape	The TV screen shows	The display window indicator shows
Stereo	Main and sub sounds	"STEREO"	"STEREO"
Left channel	Main sound	"LCH"	"MAIN/L"
Right channel	Sub sound	"RCH"	"SUB/R"
Standard sound (monaural)	Standard sound	No indication	No indication

How sound is recorded on a video tape

This VCR records sound onto two different tracks. High-fidelity sound (usually stereo) is recorded onto the main track along with the picture. Monaural sound is recorded onto the normal audio track along the edge of the tape.

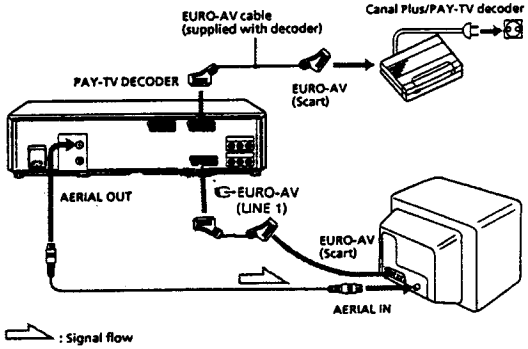


Except UX model

Setting the Canal Plus/ PAY-TV decoder

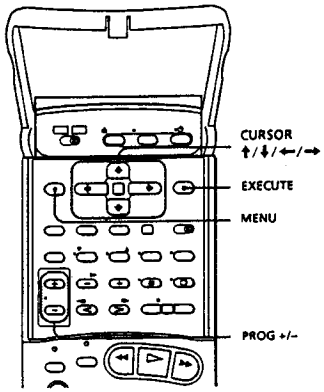
You can watch or record Canal Plus/PAY-TV programmes if you connect a decoder (not supplied) to the VCR.

How to hook up



Notes

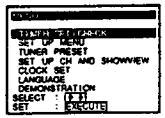
- To superimpose subtitles while watching Canal Plus/ PAY-TV programmes, make both decoder-VCR and VCR-TV connections using 21-pin EURO-AV cable that are compatible with the RGB signals. You cannot record subtitles on the VCR.
- When you watch Canal Plus/PAY-TV programmes using the aerial input of the TV, press TV/VTR on the VCR or the remote commander so that the VTR indicator appears in the display window.



Setting Canal Plus/PAY-TV channels

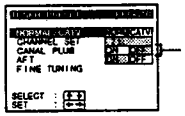
To watch or record Canal Plus/PAY-TV programmes, set your VCR to receive the channels using the on-screen display.

1 Turn on your decoder.
2 Lift the cover of the remote commander and press MENU.
The main MENU appears on the TV screen.



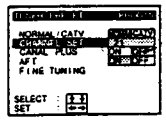
3 Press CURSOR ↑/↓ to move the cursor (▮) to TUNER PRESET, then press EXECUTE.
The TUNER PRESET menu appears.

e.g. *SLV-E1000NP*

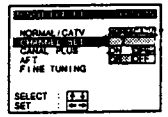


For the SLV-E1000VC, PAY-TV ON/OFF appears instead.

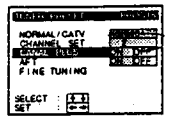
4 Press PROG +/– to select the desired programme position.



5 Press CURSOR ↑/↓ to move the cursor (▮) to CHANNEL SET, then tune in the Canal Plus/PAY-TV channels.

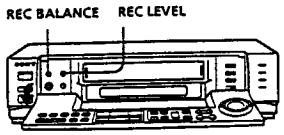


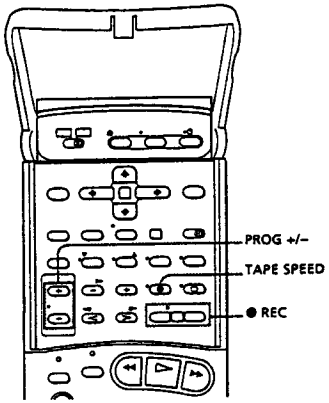
6 Press CURSOR ↑/↓/←/→ to move the cursor (▮) to CANAL PLUS (*SLV-E1000NP*) or PAY-TV (*SLV-E1000VC*), then highlight ON.



7 Press EXECUTE to store the setting.

Recording TV programmes





Notes

- If you insert a tape with its safety tab removed, the VCR starts playing. To record on this tape, cover the tab hole.
- If you've inserted a tape with its safety tab removed, the VCR ejects it when you press ● REC.

Tips

- To select programme positions, you can also use the programme number buttons on the remote commander. For two-digit numbers, press the -/– (ten's digit) button followed by the programme number buttons.
- The JOG dial on the remote commander can also be used to select programme positions. Press the PROG button located next to the JOG/SHUTTLE button to turn on its indicator and turn the JOG dial. After selecting the programme, press PROG again to turn off the indicator.
- To record a video source from LINE IN jacks, press INPUT SELECT to display "L1","L2", "L3" or "L4" in the display window.

This section shows you how to record TV programmes in the most basic way: manual recording. With manual recording, you start the VCR recording when the programme begins, then stop it when the programme ends. The VCR also provides the following ways of recording:

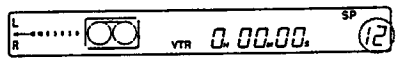
- Manually start recording, then stop it automatically—"Recording using the quick timer" (page 28)
- Automatically start and stop recording—"Recording TV programmes using the timer" (page 31)
- Automatically start and stop recording by simply entering the "PlusCode"—"Recording TV programmes using VIDEO Plus+" (page 36)

1 **Turn on your TV and tune in to the VCR:**
- If the TV is connected to the VCR using the EURO-AV cable, set the TV to video input.
- If the TV is connected to the VCR using only the aerial cable, set the TV to the programme position for the VCR.

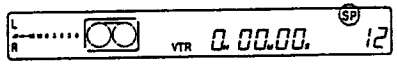
2 **Open the drop down panel and insert a tape with its safety tab in place.**

3 **Set the REC LEVEL control to 5 and the REC BALANCE control to the centre on the VCR.**

4 **Select the desired programme position by pressing PROG +/–.**



5 **Select the tape speed, SP (standard play) or LP (long play), by pressing TAPE SPEED.**
See "To select tape speeds" on the next page.



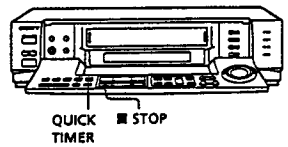
5 **Start recording by pressing two ● REC buttons simultaneously.**
When the tape reaches the end, the VCR automatically rewinds it to the beginning.

To stop recording
Press ■ STOP.

Recording TV programmes (continued)

Tips

- To cut out an unwanted scene while recording, press II PAUSE, turn the JOG dial/SHUTTLE ring on the VCR to rewind the tape to the beginning of the unwanted scene, then press II PAUSE to resume recording.
- The display appears on the TV screen won't be recorded on the tape.
- If you don't want to watch TV while recording, you can turn off the TV.



To select tape speeds
When recording, select either SP or LP. LP provides recording time twice as long as SP. However, SP provides better picture quality. You can mix SP and LP on the same tape. When playing back, the VCR automatically detects the tape speed. See the table below for the maximum recording/playback time in each speed.

Tape type	Maximum recording/playback time	
	SP	LP
E-300	5 hrs.	10 hrs.
E-240	4 hrs.	8 hrs.
E-180	3 hrs.	6 hrs.
E-120	2 hrs.	4 hrs.
E-60	1 hr.	2 hrs.

Recording using the quick timer

The quick timer enables you to record for a specified period of time in intervals of 30 minutes. Once you specify the recording time, the VCR automatically stops recording. Before you begin, check that the clock is set correctly.

After you start recording, press QUICK TIMER until the desired duration appears in the display window. The TIMER REC indicator on the VCR lights up. Each press increases the recording duration in increments of 30 minutes as shown below.

0:00 → 0:30 → 1:00 ----→ 10:30 → 11:00

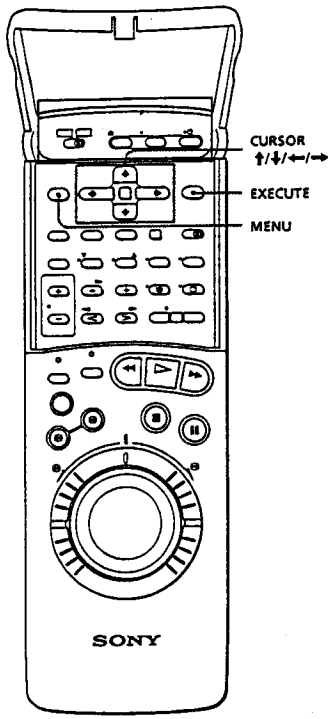
The recording duration decreases minute by minute to 0:00, then the VCR turns off automatically.

To stop recording
To stop quick-timer recording while the VCR is recording a programme, press ■ STOP.

To extend the recording duration while recording
Press QUICK TIMER until the desired duration appears in the display window.

Watching a TV programme while recording another

You can watch a TV programme and record another at the same time.
1 Press TV/VTR on the top right of the remote commander to turn off the VTR indicator in the display window.
2 Select the desired programme position on the TV.



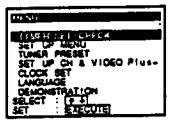
Tip

- When you set HIFI AUDIO to NICAM, the stereo or bilingual sound is recorded on the hi-fi audio track and the standard sound is recorded on the normal audio track.

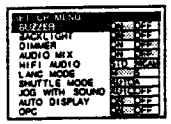
Recording stereo and bilingual programmes in NICAM system

This VCR receives and records stereo and bilingual programmes based on the NICAM system. When NICAM broadcasts are received, the NICAM indicator appears in the display window; when stereo programmes are received, the STEREO indicator appears in the display window; when bilingual programmes are received, the MAIN/L indicator lights up in the display window.

1 Lift the cover of the remote commander, and press MENU.
The main MENU appears on the TV screen.



2 Press CURSOR ↑/↓ to move the cursor (▮) to SET UP MENU, then press EXECUTE.
The SET UP MENU appears.



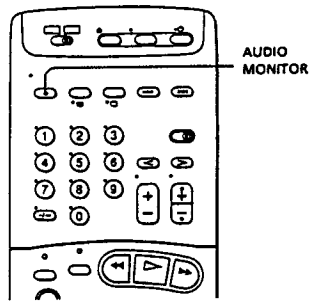
3 Press CURSOR ↑/↓/←/→ to move the cursor (▮) to HIFI AUDIO, then highlight NICAM.

4 Press EXECUTE to store the setting.

Using the NICAM setting, NICAM broadcasts are recorded as in the following table.

Track	Sound recorded	
	Stereo	Bilingual
Hi-fi audio Left channel	Left channel	Main
Hi-fi audio Right channel	Right channel	Sub
Normal audio (monaural)	Standard (usually the mixed sound of left and right channels)	Standard (usually the main sound)

Recording TV programmes (continued)



Note

- If you set HIFI AUDIO to STD, the standard sound is recorded on both the hi-fi and normal audio tracks. (You cannot select the listening sound using AUDIO MONITOR.)

To monitor stereo and bilingual programmes while recording
Set HIFI AUDIO to NICAM. Press AUDIO MONITOR to select the desired sound.

Stereo programmes

To listen to	Press AUDIO MONITOR until	
	The TV screen shows	The display window shows
Stereo sound	"STEREO"	"STEREO"
Standard sound	No indication	No indication

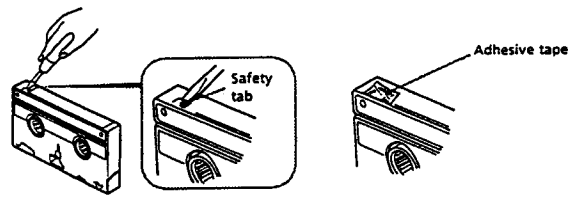
Bilingual programmes

To listen to	Press AUDIO MONITOR until	
	The TV screen shows	The display window shows
Main sound	"MAIN"	"MAIN/L"
Sub sound	"SUB"	"SUB/R"
Main and sub sounds	"MAIN/SUB"	"MAIN/L, SUB/R"
Standard sound	No indication	No indication

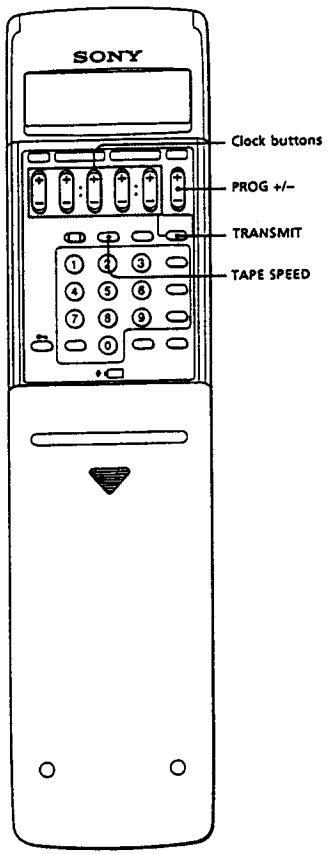
Saving a recording

Video tapes have a safety tab to protect against accidental recording. To prevent accidental erasure of a recording, break off the safety tab with a screwdriver or other tool. A tape with its safety tab removed is ejected if you try to record on it.

To record on a tape with its safety tab removed, cover the tab hole with adhesive tape.



Recording TV programmes using the timer



Tip
- To record a video source from LINE IN jacks, press INPUT SELECT to display "L1", "L2", "L3" or "L4" in the "PROG" position.

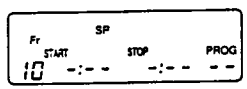
This section shows you how to let the VCR automatically start and stop recording TV programmes. You can preset up to eight programmes within a one month time frame.
For timer setting, you may use either the remote commander display (this page) or the menu on the TV screen (page 33).

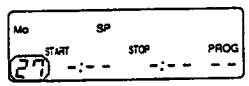
Setting the timer using the remote commander display

Before you start...
- Check that the clock of the remote commander and the VCR's clock are set correctly.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.

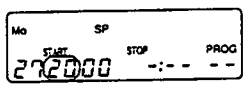
1 **Slide down the back cover of the remote commander.**

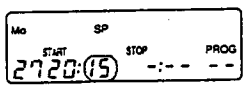
2 **Set the date to start recording by pressing DAY D +/–.**
The day of the week is set automatically.
To record the same programme every day or the same day once a week, see "Daily/weekly recording" on page 32.



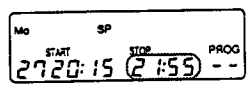


3 **Set the time to start recording.**
1 Press START H +/– to set the hour when you want to start recording.
2 Press START M +/– to set the minutes.

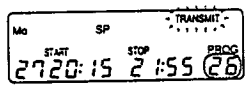




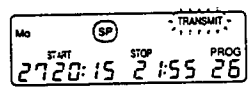
4 **Set the time to stop recording by pressing STOP H +/– and M +/–.**



5 **Select the programme position by pressing PROG +/–.**



6 **Select the tape speed, SP or LP, by pressing TAPE SPEED.**
See "To select tape speeds" on page 28.

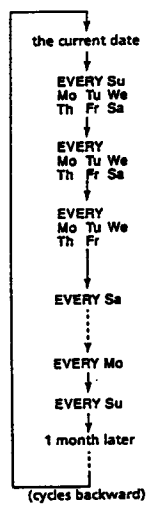


(continued)

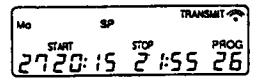
Recording TV programmes using the timer (continued)

Tips
- To change or correct the setting before transmitting it, press the button for the item you want to change.
- To ensure the timer recording regardless of broadcast delays, early starts, etc., use the PDC function. See page 35.

Note
- If the power is interrupted for more than one hour while the VCR is standing by for recording, the timer settings are cleared. Reset the timer.



7 **Point the remote commander at the VCR and press TRANSMIT to store the setting in the VCR's memory.**
A beep sound indicates that the programme has been transmitted to the VCR. The TIMER REC indicator on the VCR lights up and the VCR stands by for recording.
To preset another timer setting, repeat steps **2** to **7**.
The VCR automatically turns on and starts recording at the preset start time, and turns off at the preset stop time.

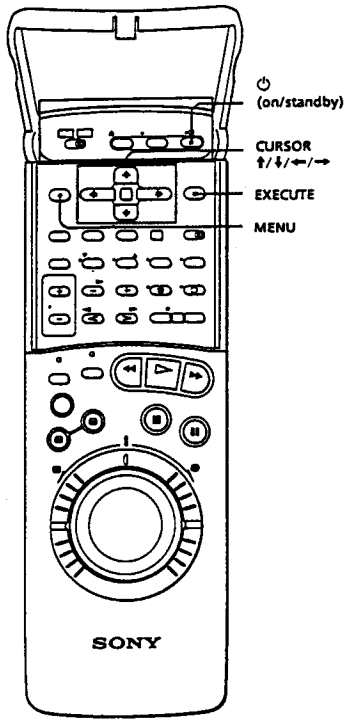


To stop recording
To stop while the VCR is recording a programme, press ■ STOP.

Daily/weekly recording

Daily recording records the same programme every day of the week; weekly recording records the same programme on the same day, every week.

When you set the date to start recording in step **2** above, press the D – button until the desired day appears. Each time you press the button, the indication changes as shown on the left.

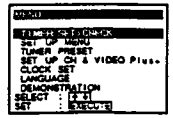


Setting the timer using the menu

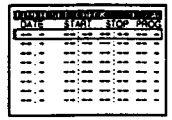
Before you start...

- Check that the VCR's clock is set correctly.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- Turn on your TV and tune in to the VCR.

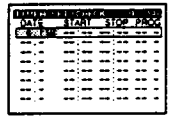
1 **Lift the cover of the remote commander and press MENU.**



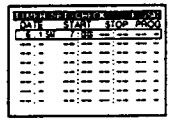
2 **Press CURSOR ↑/↓ to move the cursor (▮) to TIMER SET/CHECK, then press EXECUTE.**
The TIMER SET/CHECK menu appears.



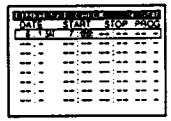
3 **Set the date to start recording.**
1 Press CURSOR → to highlight the date.
Make sure today's date is displayed. If it isn't, adjust the clock.
2 Press CURSOR ↑/↓ to set the date.
The day of the week is set automatically.



4 **Set the time to start recording.**
1 Press CURSOR → to highlight the hour under "START," then press CURSOR ↑/↓ to set the hour.
2 Press CURSOR → to highlight the minutes under "START," then press CURSOR ↑/↓ to set the minutes.



5 **Press CURSOR →, then set the time to stop recording in the same way.**



(continued)

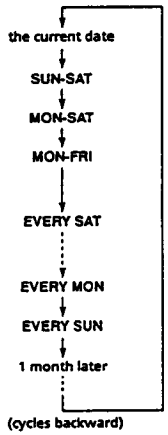
Recording TV programmes using the timer (continued)

Tips

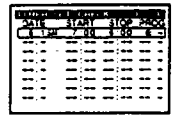
- To set the programme position, you can also use the PROG +/– or programme number buttons.
- To record a video source from LINE IN jacks, press INPUT SELECT to display "LINE1", "LINE2" "LINE3" or "LINE4" in the "PROG" position.
- To set the recording tape speed, you can also use TAPE SPEED.
- To change the digits during setting, press CURSOR ← to return to the item to be changed, and select the digits using CURSOR ↑/↓.
- To ensure the timer recording regardless of broadcast delays, early starts, etc., use the VPS/PDC function. See page 35.

Note

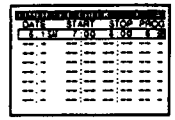
- If the power is interrupted for more than one hour while the VCR is standing by for recording, the timer settings are cleared. Reset the timer.



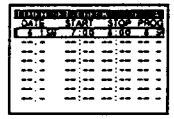
6 **Press CURSOR →, then select the programme position by pressing CURSOR ↑/↓.**



7 **Press CURSOR →, then select the tape speed, SP or LP, by pressing CURSOR ↑/↓.**
See "To select tape speeds" on page 28.



8 **To confirm your programme, press CURSOR →.**
The cursor (▮) appears in the leftmost column.
To preset another timer setting, move the cursor to the next line using CURSOR ↓, and repeat steps 3 to 8.



9 **After making the desired timer settings, press EXECUTE.**

10 **Press ⏻ (on/standby) to turn off the VCR.**
The TIMER REC indicator on the VCR lights up. The VCR turns off automatically and enters timer recording standby mode.
The VCR automatically turns on and starts recording at the preset start time, and turns off at the preset stop time.

To stop recording

To stop while the VCR is recording a programme, press ■ STOP.

Daily/weekly recording

Daily recording records the same programme every day of the week; weekly recording records the same programme on the same day, every week.

When you set the date to start recording in step **3** above, press CURSOR ↓ until the desired day appears. Each time you press the button, the indication changes as shown on the left.

Notes

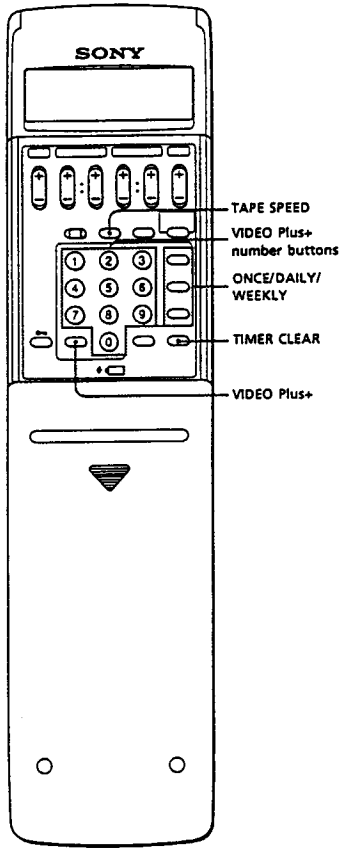
- If recording times overlap due to a VPS/PDC timer shift, the programme that was broadcast first has priority. The second programme will begin to record only when the first programme has finished.
- If the VPS/PDC signal is too weak or the broadcasting station failed to transmit VPS/PDC signals, the VCR will record the programme without using the VPS/PDC function even if the VPS/PDC indicator is lit on the VCR.
- When the VPS/PDC function is on, "PDC" appears on the TV screen.

Timer recording with VPS/PDC signals

The broadcast system transmits VPS (Video Programme System) signals or PDC (Programme Delivery Control) signals with its TV programmes. These signals ensure that your timer recordings are made regardless of broadcast delays, early starts or broadcast interruptions on that day. When setting the timer, make sure to enter the start time exactly as indicated in the TV programme guide, otherwise the VPS/PDC function will not work.

1 If the TIMER REC indicator on the VCR is lit, press ⏻ (on/standby) to release the VCR from standby and turn it on.
2 While the VCR is turned on, press VPS/PDC.
The VPS/PDC indicator lights up on the VCR.
3 If you turned off the TIMER REC indicator in step 1, press ⏻ (on/standby).
The TIMER REC indicator lights up and the VCR returns to recording standby. Once you switch on the VPS/PDC function, it works on all timer settings that are set to programmes with VPS/PDC signals.

Recording TV programmes using VIDEO Plus+



Note

- The programme number buttons on the front panel of the remote commander don't work while the remote commander is in the VIDEO Plus+ mode.

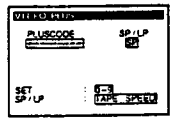
The section shows you another way of timer recording: recording using VIDEO Plus+. This allows you to record TV programmes more easily. Just enter the programme's "PlusCode," and the VCR will automatically record the programme. You can preset up to eight programmes within a one month time frame. To take advantage of this feature, you must first set up your VCR and assign programme positions to the various guide channels. For details, see "Setting up VIDEO Plus+ manually" on page 21.

Before you start...

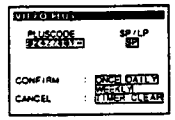
- Check that the VCR's clock is set correctly.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- Turn on your TV and tune in to the VCR.

1 Slide down the back cover of the remote commander.

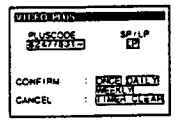
2 Press VIDEO Plus+.
The remote commander display enters the VIDEO Plus+ mode and the VIDEO PLUS menu appears on the TV screen.



3 Use the VIDEO Plus+ number buttons to enter the desired programme's PlusCode.
If you made a mistake, press TIMER CLEAR and enter the correct number.



4 Select the tape speed, SP or LP, by pressing TAPE SPEED.



Tips

- To exit from the VIDEO Plus+ mode, press VIDEO Plus+ before pressing ONCE, DAILY or WEEKLY in step 5.
- The remote commander exits from the VIDEO Plus+ mode automatically in about 12 seconds after ONCE, DAILY or WEEKLY was pressed.

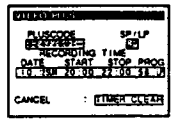
Notes

- You cannot set VIDEO Plus+ in the following cases:
  - When the VCR is turned off.
  - While recording using the timer or quick timer.
- The timer will not accept settings in the following cases:
  - When you select DAILY for a Saturday or Sunday programme.
  - When you select DAILY or WEEKLY for a programme more than seven days ahead.
  - When you enter the PlusCode of a programme that has already ended.
- If the VCR dose not accept the setting, check the PlusCode again and change it repeating from step 2.

5 Press ONCE, DAILY or WEEKLY according to the following table.

To record the programme	Press
Only once	ONCE
Monday to Friday at the same scheduled time	DAILY
Every week at the same scheduled time	WEEKLY

The recording information appears on the TV screen: date, programme start and stop times, programme position number and tape speed.
Check that the information is correct. If it is not, press TIMER CLEAR to cancel the setting.
If you set the wrong PlusCode, the VCR sounds short beeps.
To preset another timer setting, repeat steps 2 to 5.

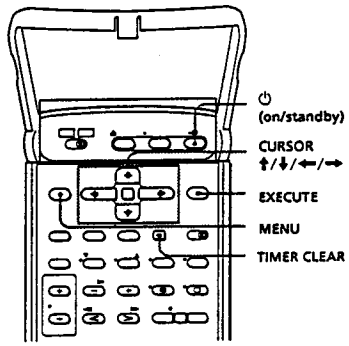


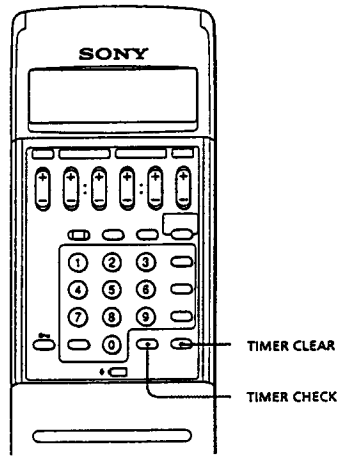
6 Press ⏻ (on/standby) to turn off the VCR.
The TIMER REC indicator on the VCR lights up. The VCR turns off automatically, and enters timer recording standby mode.
The VCR automatically turns on, records the programme and turns off.

To stop recording
To stop while the VCR recording a programme, press ■ STOP.

To record satellite broadcasts
If you connect the satellite tuner and the VCR, you can record satellite programmes.
1 Turn on the satellite tuner.
2 On the satellite tuner, select the satellite programme for which you wish to make a timer setting.
3 Repeat the steps described above.
4 Keep the satellite tuner turned on until the VCR finishes recording the satellite programme for which you have made a timer setting.

Checking/changing/cancelling timer settings



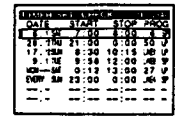


This section shows you how to check, change and cancel the timer settings after you've stored them in the VCR.

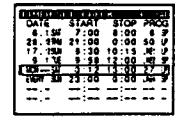
Before you start...
- Turn on your TV and tune in to the VCR.

1 Press ⏻ (on/standby) to turn on the VCR.

2 Press TIMER CHECK to display the TIMER SET/CHECK menu on the TV screen.
You may press MENU, CURSOR ↑/↓ and EXECUTE to select TIMER SET/CHECK menu.



3 Check the timer settings in the list.
- If you don't want to change or cancel the settings, press ⏻ (on/standby) to return to recording standby.
- If you want to change or cancel the settings, press TIMER CHECK to move the cursor (▮) to the setting you want to change or cancel.



4 Change or cancel the timer setting:
- To change the setting, press CURSOR ←/→ to highlight the item you want to change, and reset it using CURSOR ↑/↓. Then, press CURSOR → repeatedly until the cursor appears in the leftmost column.
- To cancel the setting, press TIMER CLEAR.

5 Press EXECUTE.
The VCR returns to the original screen. If there are any timer settings left in the TIMER SET/CHECK menu, press ⏻ (on/standby) to return to recording standby.

To check the timer settings during timer recording
Press TIMER CHECK. After checking, press EXECUTE to turn off the display.

Additional instructions about timer recording

This section gives additional information about timer recording which you need after you have stored timer settings in the VCR.

To use the VCR while recording

You can do the following tasks during timer recording.

To	Press
Reset the counter to "0H00M00S"	COUNTER RESET
Display tape information on the TV screen	DISPLAY
Check the timer settings	TIMER CHECK
Watch another TV programme	TV/VTR (See "Watching a TV programme while recording another" on page 28.)

Using the VCR before timer recording begins

Press ⏻ (on/standby). The TIMER REC indicator on the VCR goes off and the VCR is ready for use.
After using the VCR, press ⏻ (on/standby) again to turn on the TIMER REC indicator on the VCR. Remember to reset the VCR to stand by for recording before the time you've set the VCR to start recording, or the timer setting will be cancelled.

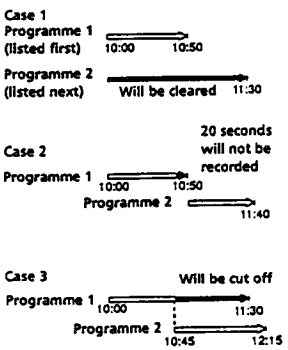
When the timer settings overlap

The VCR will not record overlapping programmes. If any of your timer settings overlap, change the settings.

Case 1: If you preset two programmes to start recording at the same time...
The programme listed first in the TIMER SET/CHECK menu has priority over the other programmes. The timer settings of lower priority programmes will be erased from the list when the first programme begins recording.

Case 2: If you preset programme 2 to start recording at the same time you preset programme 1 to finish recording...
The last 20 seconds of programme 1 will not be recorded because the VCR will enter recording pause for programme 2 before programme 1 is finished.

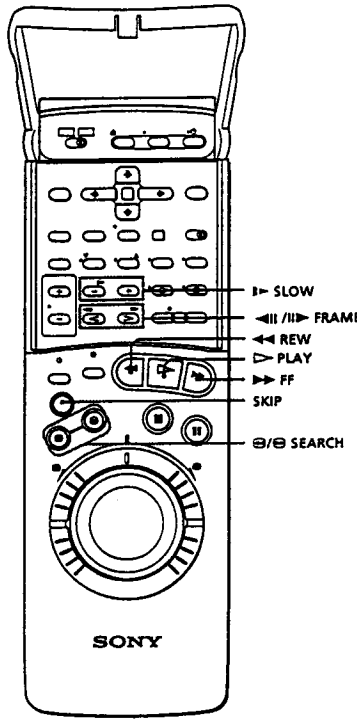
Case 3: If you preset programme 2 to start recording before programme 1 is finished recording...
Programme 2 will start recording before programme 1 has finished.



Note
- The priority of the overlapping programmes may be different from the above cases if the VPS or PDC function is activated. See "Timer recording with VPS/PDC signals" on page 35.

Additional Operations

Playing/searching at various speeds



Tip
- Adjust the picture using ▼/▲ TRACKING NORMAL/SLOW STILL ADJUST if:
  - Streaks appear while playing in slow motion.
  - Bands appear on the top or bottom while pausing.
  - The picture shakes while pausing.

Note
- If you use these functions in the LP mode, there may be no colour or the screen may be dim.

You can play back a tape at various speeds: high-speed, slow motion, frame by frame and so on. These options are also useful for searching for a specific point during playback. The sound is muted during these operations.

Using the tape transport buttons

Playback options	Operation	To resume normal playback
Fast-forwarding/ Rewinding	Press ▶▶FF or to ◀◀REW.	Press ▷ PLAY.
Viewing the picture during fast-forward or rewind	During fast-forward, keep pressing ▶▶FF. During rewind, keep pressing ◀◀REW.	To return to the previous mode, release the button.
Locking in a high-speed picture	During playback or pause, press ⊖ SEARCH or ⊖ SEARCH.	Press ▷ PLAY.
Locking in a slow-motion picture	During playback or pause, press SLOW −/+. You can increase the playback speed with the + button and decrease the speed with the − button. To change direction, press ◀II FRAME (backward) or II▶FRAME (forward).	Press ▷ PLAY.
Playing frame by frame	During pause, press II▶ FRAME to advance the picture one frame or ◀II FRAME to reverse the picture one frame. Keep pressing the button to advance or reverse one frame every one second.	Press ▷ PLAY or II PAUSE.
Playing in reverse	During playback, press ◀II FRAME.	Press ▷ PLAY.
Skipping a scene	During playback, press SKIP. Pressing once skips about 30 seconds.	The VCR automatically resumes normal playback.
Rewind and restart play	During stop, press ▷ PLAY on the VCR while pressing the ◀◀ REW button on the VCR.	—

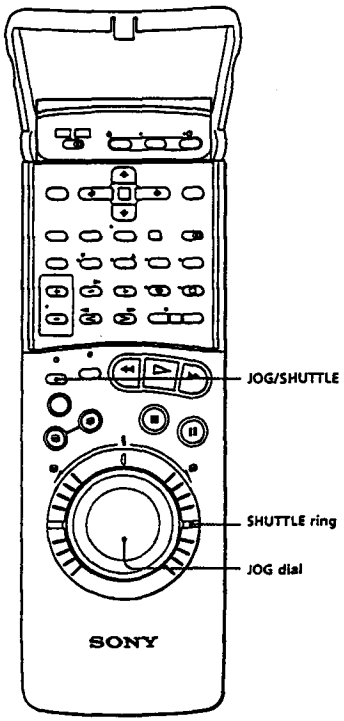
Using the JOG dial/SHUTTLE ring

To use the JOG dial/SHUTTLE ring on the remote commander for playing/searching at various speeds, first press JOG/SHUTTLE on the remote commander to turn on its indicator. After using, press JOG/SHUTTLE again to turn off the indicator.

Playback options	Operation	To resume playback pause
Playing at various speeds:	During playback pause, turn the SHUTTLE ring right or left to:	Release the ring
One-fifth the normal speed	1/5	
The normal speed	1	
Twice the normal speed	×2	
High speed	⊖ or ⊖	
Playing at the speed at which you turn the JOG dial	During playback pause, turn the JOG dial to right or left. The speed changes from frame-by-frame to 1/5 to normal as you turn the dial faster.	Release the dial.

Note

- When JOG or SHUTTLE is in use, no tape transport buttons function.



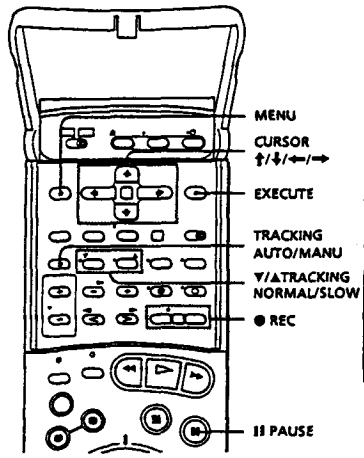
Adjusting the picture

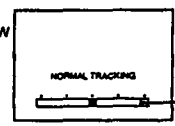
The VCR automatically adjusts the picture and sound for the best possible playback or recording. If, however, you find the automatic adjustment unsatisfactory, you can adjust the picture manually.

Adjusting the tracking

Though the VCR automatically adjusts the tracking when playing a tape (the AUTO TRACKING indicator flashes in the display window, then lights steadily), distortion may occur if the tape was recorded in poor condition. If so, manually adjust the tracking condition.

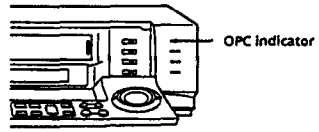
Press ▼/▲ TRACKING NORMAL/SLOW to display the tracking meter. The distortion should disappear as you press one of the two buttons. If you cannot get a clear picture with manual adjustment, press TRACKING AUTO/MANU to return to automatic adjustment.

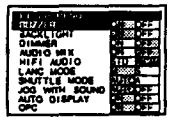




About Optimum Picture Control (OPC)

Optimum Picture Control (OPC) automatically improves recording and playback quality by adjusting the VCR to the condition of the video heads and tape. To maintain better picture quality, we recommend that you leave OPC ON on the SET UP MENU screen (with the OPC indicator lit on the VCR).





Notes

- Tapes recorded using the OPC function are played back normally on VCRs that do not have the OPC function.
- Press II PAUSE to start recording after the OPC indicator stops flashing. If you start recording before the OPC indicator stops flashing, the OPC function is cancelled.

To use OPC during playback

The OPC function automatically works on all types of tapes, including rental tapes. You can play a tape using the OPC function even if the tape was not recorded with it.

To use OPC while recording

Whenever you insert a tape and first start recording, the VCR adjusts to the tape using the OPC function (the OPC indicator flashes rapidly). This adjustment is retained until the tape is ejected. There is a short delay before the VCR actually starts recording while the VCR analyzes the tape.

If you want to start recording precisely the first time you record, set the VCR to recording pause mode (the OPC indicator flashes slowly) and press ● REC to let the VCR analyze the tape. When the OPC indicator stops flashing, press II PAUSE to start recording. Recording begins immediately.

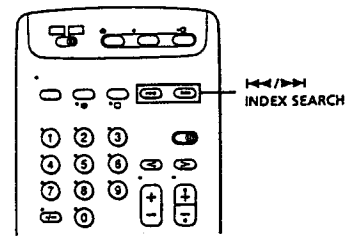
To deactivate the OPC

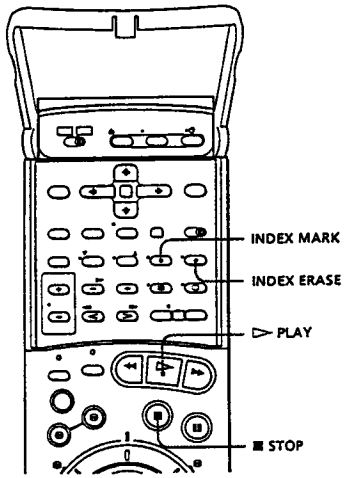
Press MENU and select SET UP MENU, then set OPC to OFF. The OPC indicator goes off.

Searching using the index function

Note

- The index signal is not marked automatically when recording starts from recording pause. However, you can mark an index signal if you change the channel during recording pause.





Note

- You can't mark or erase index signals on a tape with its safety tab removed.

The VCR automatically marks an index signal at the point where recording starts (with the exception of when you start recording from recording pause). Use this as a reference to find the beginning of the recording. Since the index number indicates the relative position from the current position, specify how many index signals ahead or behind the specific index signal is from the current position.

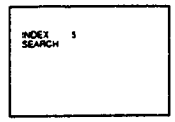
Locating an index

1 Open the drop down panel and insert an indexed tape into the VCR.

2 Press ⏮/⏭ INDEX SEARCH repeatedly until the index number you want appears on the TV screen:

- To locate succeeding programmes, press ⏭ INDEX SEARCH.
- To locate preceding programmes, press ⏮ INDEX SEARCH.

The VCR starts searching and the index number on the TV screen counts down to zero. Playback starts automatically from that point.



Marking index signals

You can mark an index signal anywhere on a tape, so that you can easily find the specific point later on. Press INDEX MARK while in recording or playback mode.

Erasing index signals

You can remove any unwanted index signals using this function.

1 Press ⏮/⏭ INDEX SEARCH while in stop or playback mode.
The VCR rewinds or fast-forwards the tape automatically, and playback starts when the index number indicated on the TV screen reaches "0".

2 Press INDEX ERASE during 10-second preview for the index you want to erase.
To stop erasing index signals, press ▷ PLAY or ■ STOP.

Looking at menu options

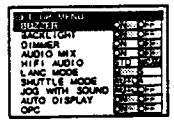
Tip

- See "How sound is recorded on a video tape" on page 26.

Note

- The JOG WITH SOUND option is not effective for the JOG dial/SHUTTLE ring on the remote commander.

The SET UP MENU provides you with various options to set up and customize your VCR. See the table below for the available menu choices. Initial settings are indicated in bold letters.



To change the setting

Press CURSOR ↑/↓ to highlight the menu option and change the setting using CURSOR ←/→.

Menu choices

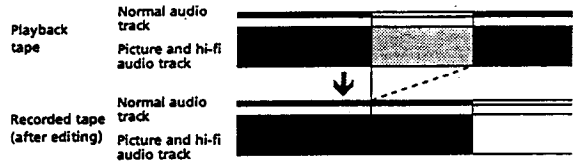
Menu option	Set this option to
BUZZER	• **ON** to output a beep sound when all illogical operation is made. • **OFF** to deactivate it.
BACKLIGHT	• **ON** to backlight the display on the VCR. • **OFF** to turn it off.
DIMMER	• **ON** to dim the VCR display. • **OFF** to brighten it.
AUDIO MIX	• **ON** to listen to the hi-fi and normal audio tracks at the same time. The AUDIO MONITOR button becomes inoperable. • **OFF** to select the sound using the AUDIO MONITOR button. For details, see page **26** and **53**.
HIFI AUDIO	• **STD** to record standard sound on a hi-fi audio track. • **NICAM** to record NICAM broadcasts on a hi-fi audio track. For details, see page **29**.
LANC MODE	• **M** to control another VCR with this VCR using the LANC jack. • **S** to control this VCR with another VCR.
SHUTTLE MODE	• **AUTO** to use this remote commander with a VCR that has a JOG/SHUTTLE function. • **A** to use it with a VCR that doesn't have a JOG/SHUTTLE function.
JOG WITH SOUND	• **AUTO** to listen to the sound while operating the JOG dial/SHUTTLE ring on the VCR in the edit standby mode. • **OFF** to mute the sound while operating the JOG dial/SHUTTLE ring on the VCR in the edit standby mode.
AUTO DISPLAY	• **ON** to display the tape operation mode, programme number, etc. on the TV screen each time you operate the VCR. • **OFF** to display the information on the screen when you press the DISPLAY button.
OPC	• **ON** to activate the OPC (Optimum Picture Control). • **OFF** to deactivate it. For details, see page **42**.

Editing methods

This section introduces you to various ways of editing tape recordings. For simpler operation and more accurate editing, connecting a VCR equipped with a LANC jack is recommended. See "Hooking up to a VCR with a LANC cable" on page 47. Note that for programme assemble editing, this connection is a must. If your VCR doesn't have a LANC jack, see "Hooking up to a VCR without a LANC cable" on page 57.

Basic editing

Besides making a copy of a tape, you can also cut out unwanted scenes.

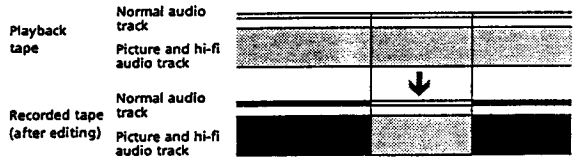


Insert editing

You can replace an existing scene with material from another recording. There are three kinds of insert editing:

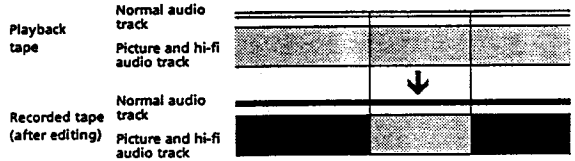
A/V insert

Records over the existing picture and sound. The sound on both the hi-fi and normal audio tracks is replaced.



Video insert

Records over the existing picture. The sound on the hi-fi track is also replaced but the normal audio track remains unchanged.



Editing methods (continued)

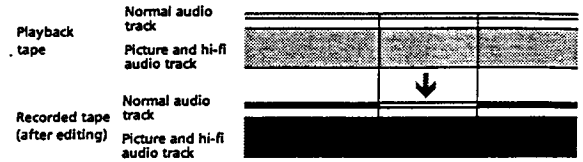
Tips

- To select between the hi-fi and normal audio track, press AUDIO MONITOR.
- To hear both audio tracks at the same time, set AUDIO MIX to ON in the SET UP MENU.
- For further information on audio tracks, see "How sound is recorded on a video tape" on page 26.

Audio insert

Records over the normal (monoaural) audio track. The original hi-fi track and picture remain unchanged.

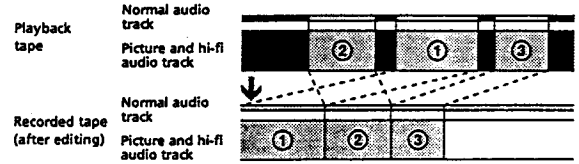
You can also use this feature to add commentary and background music to a tape that you have recorded with a camcorder (see "Audio dubbing for commentary and background music" on page 63).



Programme assemble editing

Enables you to select various scenes from a source tape and record them in any order you choose.

To use this function, you must connect to a VCR equipped with a LANC jack.



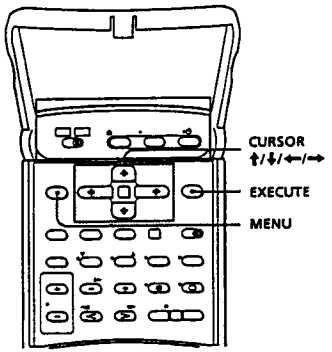
Hooking up to a VCR with a LANC cable

Tip

- Jacks indicated as CONTROL L or REMOTE have the same function as the LANC jack. To connect to a CONTROL L or REMOTE jack, use the appropriate cable.

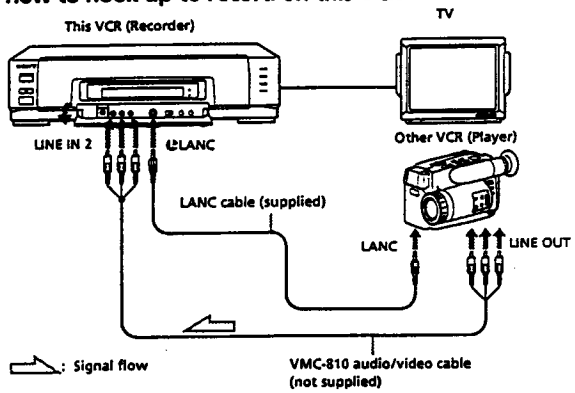
Notes

- Make sure to connect the plugs to jacks of the same colour.
- If you connect both the LINE IN and LINE OUT jacks of this VCR to the other VCR, be sure to select the input correctly to prevent a humming noise.
- If the playback VCR is a monaural type and you use LINE IN 2 on the front of this VCR, connect to the AUDIO L (white) jack.



If the other VCR is equipped with a LANC jack, connect the VCRs with the LANC cable. This additional connection lets you control the other VCR from this VCR and synchronize the starting and stopping of the VCRs. This greatly simplifies editing. If the other VCR does not have a LANC jack, see page 57 for instructions on connections.

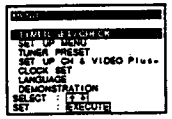
How to hook up to record on this VCR



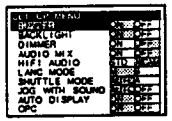
Setting the LANC mode and SHUTTLE mode

The LANC mode setting determines which VCR controls the other. Set the LANC mode so that the recording VCR becomes the controlling VCR: set the recording VCR to LANC mode M and the playback VCR to LANC mode S. Sony brand camcorders should be set to LANC mode S. You also need to set the SHUTTLE mode depending on whether the other VCR has a JOG/SHUTTLE function or not.

1 Lift the cover of the remote commander and press MENU.
The main MENU appears on the TV screen.



2 Press CURSOR ↑/↓/←/→ to move the cursor (▮) to SET UP MENU, then press EXECUTE.
The SET UP MENU appears.



(continued)

Hooking up to a VCR with a LANC cable (continued)

3 Press CURSOR ↑/↓/←/→ to move the cursor (▮) to LANC MODE, then highlight M.

4 Press CURSOR ↑/↓/←/→ to move the cursor (▮) to SHUTTLE MODE, then highlight AUTO or A.
- Set SHUTTLE MODE to AUTO if the other VCR has a JOG/SHUTTLE function.
- Set SHUTTLE MODE to A if other VCR does not have a JOG/SHUTTLE function.

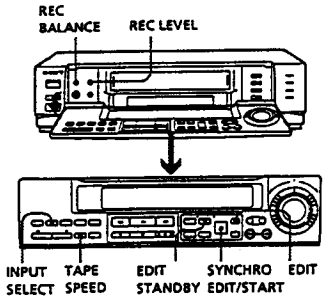
5 Press EXECUTE to store the setting.

6 On the playback VCR, set the LANC mode to S.

About LANC

LANC stands for Local Application Control Bus System. The LANC jack is used for controlling the tape transport of video equipment and peripherals connected to it. This jack has the same function as jacks indicated as CONTROL L or REMOTE.

Basic editing with a LANC connection



Making a copy of a tape

Before you start editing...
- Follow the instructions on page 47 to hook up your VCRs.
- Turn on your TV and tune in to the VCR.

On the playback VCR
- Switch on the EDIT mode if available.
- Turn off on-screen displays.
- When recording from a stereo/bilingual source tape, set the playback VCR to output both main and sub channels.

On this (recording) VCR
- Press EDIT to display "EDIT" in the display window.
- Press INPUT SELECT to display the addressed input in the display window.
- Set the REC LEVEL control on the VCR to [5] and the REC BALANCE control on the VCR to the centre.
- Press TAPE SPEED to select the recording tape speed (SP/LP).

1 **Insert a source tape with its safety tab removed into the other (playback) VCR. Search for the point where you want to start playback for editing.**

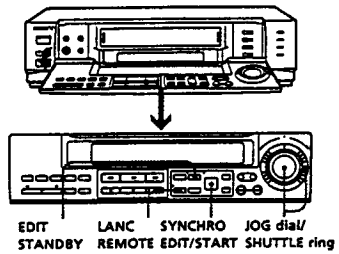
2 **Insert a blank tape into this (recording) VCR and search for the point you want to start recording.**

3 **Press EDIT STANDBY on this VCR.**
This (recording) VCR enters recording pause and the other (playback) VCR enters playback pause.

4 **Press SYNCHRO EDIT/START to start editing.**

5 **To finish editing, press EDIT STANDBY.**
Both VCRs stop.

Basic editing with a LANC connection (continued)



Tip
- You can use the tape transport buttons instead of the JOG/SHUTTLE to find a point on the tape. In this case, you need to press ⏸ PAUSE to set the VCR to pause after you find the point.

Note
- If the source tape is in poor condition, this VCR may display a blue screen on the TV for a moment.

Cutting out unwanted scenes

You can edit out unnecessary scenes while making a copy of a tape.

Before you start editing...
Prepare the playback VCR and this (recording) VCR following the instructions for "Making a copy of a tape" on page 49.

1 **Follow steps1 to 4 on page 49 to start editing.**

2 **When you come to a section that you want to leave out, press SYNCHRO EDIT/START on this VCR.**
Both VCRs are set to pause.

3 **Press LANC REMOTE on this VCR so that the indicator lights up.**
Switching on LANC REMOTE allows you to control the other (playback) VCR from this VCR.

4 **Turn the JOG dial or SHUTTLE ring on this VCR to find the next starting point on the source tape.**
When you release the JOG dial/SHUTTLE ring, the playback VCR is set to playback pause automatically.
For details how to use the JOG dial and SHUTTLE ring, see page 41.
- If part of the unwanted scene was recorded in step **2**, go to the next step, if not, skip to step **6**.

5 **Press LANC REMOTE to turn off the indicator so that you resume control of this VCR. Then turn the JOG dial or SHUTTLE ring to find the beginning of the unwanted scene.**

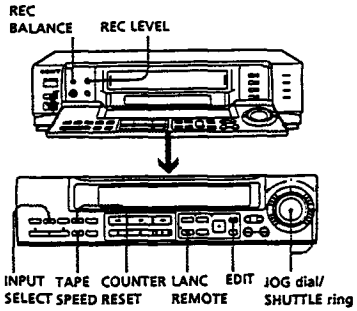
6 **Press SYNCHRO EDIT/START to resume editing.**

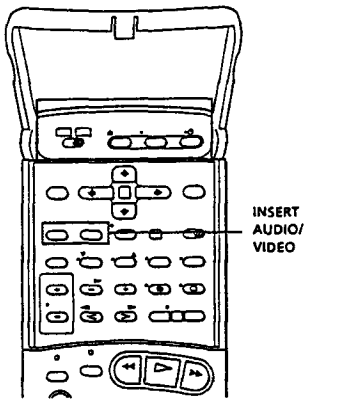
7 **To cut out other scenes, repeat steps 2 to 5.**

8 **To finish editing, press EDIT STANDBY.**
Both VCRs stop.

Insert editing with a LANC connection

Note
- The normal audio sound is monaural.





pictures and/or sound over the prerecorded tape.
There are three kinds of insert editing:
- A/V insert — all the original video, hi-fi sound, and the normal audio sound are replaced.
- Video insert — the original video and hi-fi sound are replaced. The original monaural sound is left intact.
- Audio insert — only the original normal audio sound is retained. The original video and hi-fi sound are left intact.

For adding commentary or/and background music using the audio insert function, see "Audio dubbing for commentary and background music" on page 62.

Before you start editing...
- Follow the instructions on page 47 to hook up your VCRs.
- Turn on your TV and tune in to the VCR.

On the playback VCR
- Switch on the EDIT mode if available.
- Turn off on-screen displays.
- When recording a stereo/bilingual source tape, set the playback VCR to output both main and sub channels.

On this (recording) VCR
- Press EDIT to display "EDIT" in the display window.
- Press INPUT SELECT to display the addressed input in the display window.
- Set the REC LEVEL control on the VCR to 5 and the REC BALANCE control on the VCR to the centre.
- Press TAPE SPEED to select the recording tape speed of the prerecorded tape.

1 Insert a source tape with its safety tab removed into the other (playback) VCR and insert the prerecorded tape into this (recording) VCR.

2 Press LANC REMOTE on this VCR so that the indicator lights up.
Switching on LANC REMOTE allows you to control the other (playback) VCR from this VCR.

3 Press ▷ PLAY and II PAUSE on the other (playback) VCR, then turn the JOG dial or SHUTTLE ring on this VCR to find the starting point of the source tape for playback.
When you release the JOG dial/SHUTTLE ring, the other (playback) VCR is set to playback pause automatically.
For details on the JOG dial and the SHUTTLE ring, see page 41.

(continued)

Tip
- See "How sound is recorded on a video tape" on page 26.

Note
- You must be in playback pause mode before pressing an INSERT button. (If you are in recording pause mode, you cannot use the insert features.)

off the indicator so that you resume control of this VCR. Press ▷ PLAY and IIPAUSE, then turn the JOG dial or SHUTTLE ring to find the end of the section to be recorded over.
When you release the JOG/SHUTTLE, this VCR is set to playback pause automatically.

5 Press COUNTER RESET on this VCR to reset the counter to "0H00M00S."

6 Turn the JOG dial or SHUTTLE ring to find the beginning of the section to be recorded over.
When you release the JOG/SHUTTLE, this VCR is set to playback pause automatically.

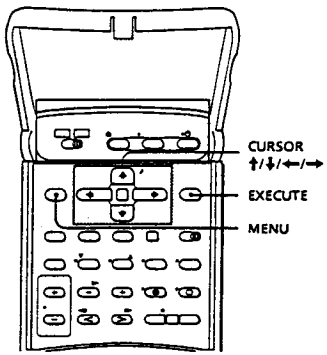
7 Press the INSERT buttons according to the following:

For	Press	So that
A/V insert	INSERT AUDIO, then INSERT VIDEO	the AUDIO INSER VIDEO INSERT ir the VCR light up a INS" appears on th
Video insert	INSERT VIDEO	the VIDEO INSER on the VCR lights INS" appears on th
Audio insert	INSERT AUDIO	the AUDIO INSER on the VCR lights INS" appears on th

8 Press EDIT STANDBY.
The indicator lights up. This (recording) VCR enters recording pause and the other (playback) VCR enters playback pause.

9 Press SYNCHRO EDIT/START to start editing.

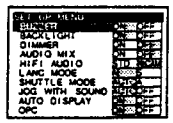
To stop editing
Press EDIT STANDBY. Both VCRs stop.



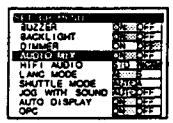
Listening to both audio tracks during playback

When playing an audio-inserted tape, you have a choice of listening to either the prerecorded hi-fi audio or the inserted normal audio sounds using the AUDIO MONITOR button. To listen to the sounds recorded on the hi-fi audio and normal audio tracks at the same time, use the SET UP MENU.

1 Press MENU and select SET UP MENU.



2 Set AUDIO MIX to ON using the CURSOR ↑/↓/←/→ buttons.
The AUDIO MONITOR button becomes inoperative, and the sound you hear is mixed.

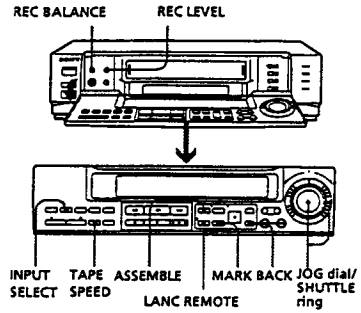


3 Press EXECUTE to store the setting.
After playing the audio-inserted tape, reset AUDIO MIX to OFF.

Note
- If AUDIO MIX remains ON, the AUDIO MONITOR button remains inoperative.

Programme assemble editing

With this function you can select random scenes from one tape and assemble them into a continuous sequence on another tape. You can edit up to twelve different scenes at a time.
If you use a VCR that features the RC-Time Code function, this function allows you to perform more precise editing in unit of frames.



Note
- When the other (playback) VCR does not have the RC-Time Code function, find the IN and OUT points using the time counter.

Operation (When recording on this VCR)

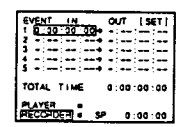
Before you start editing...
- Follow the instructions on page 47 to hook up your VCRs.
- Turn on your TV and tune in to the VCR.

On the playback VCR
- Display the Time Code in the display window if this feature is available.
- Switch on the EDIT mode if available.
- Turn off on-screen displays.

On this (recording) VCR
- Press INPUT SELECT to display the addressed input in the display window.
- Set the REC LEVEL control on the VCR to 5 and the REC BALANCE control on the VCR to the centre.
- Press TAPE SPEED to select the recording tape speed (SP/LP).

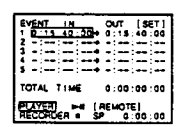
1 Insert a source tape with its safety tab removed into the other (playback) VCR and insert a blank tape into this (recording) VCR.

2 Press ASSEMBLE on this VCR.
The programme assemble editing menu appears on the TV screen.



3 Press LANC REMOTE on this VCR so that the indicator lights up.
Switching on LANC REMOTE allows you to control the other (playback) VCR from this VCR.

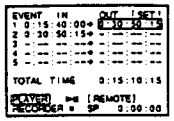
4 Set the other (playback) VCR to playback pause mode and use the JOG dial or SHUTTLE ring on this VCR to find the starting (IN) point for the first event, then press MARK.
The time counter (frame number) is displayed as the IN point.
To correct the IN point, press BACK and repeat this step.



Notes

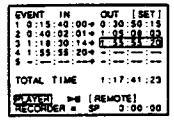
- If a scene you want to record is marked with Time Codes of less than 0:01:00:00, the scene will be edited inaccurately. In this case, use the editing procedure on page 50.
- During fast-forwarding or rewinding, if the Time Code is displayed as "-:--:--," programme assemble editing may not function. In this case, use the editing procedure on page 50.
- The IN and OUT points should be separated by more than two seconds.
- If you don't specify the OUT point, the tape will record through to the end.
- If you use a source tape recorded in both LP and SP or with blank sections, the IN and/or OUT points may be inaccurate.
- Programme assemble editing may not function properly depending on tape conditions. In this case, try manual editing.

5 **Use the JOG dial or SHUTTLE ring on this VCR to find the end (OUT) point of the first event, then press MARK.**



The time counter (frame number) is displayed as the OUT point.
To correct the OUT point, press BACK and repeat this step.

6 **Repeat steps 4 and 5 to select other IN and OUT points for editing.**



Up to 12 events can be selected for programme assemble editing.
The total time of the events you have selected is displayed.

7 **When you have finished selecting events, press ■ STOP.**

8 **Press LANC REMOTE on this VCR to turn off the indicator. Then turn the JOG dial or SHUTTLE ring to find the point where you want to start recording.**

When the starting point has been found, press II PAUSE and then ● REC.

9 **Press SYNCHRO EDIT/START to start editing.**

The indicator on the button lights up and the programme assemble editing starts.

When all the designated events are edited, this (recording) VCR enters recording pause mode and the other (playback) VCR enters stop mode.

(continued)

Programme assemble editing (continued)

To assemble edit more than 12 events

Repeat the above programme assemble procedure after one session is finished.

1 After you've finished one assemble editing session, press ASSEMBLE. The assemble editing mode is cancelled, and the IN and OUT points stored in memory are erased.
2 Press ■ STOP to cancel the recording pause.
3 Repeat steps 1 to 9.

To change the settings stored in memory

Press BACK on the VCR. Repeat pressing BACK to go back to the desired event to change. And then update the IN and OUT points following the procedure in steps 4 and 5.

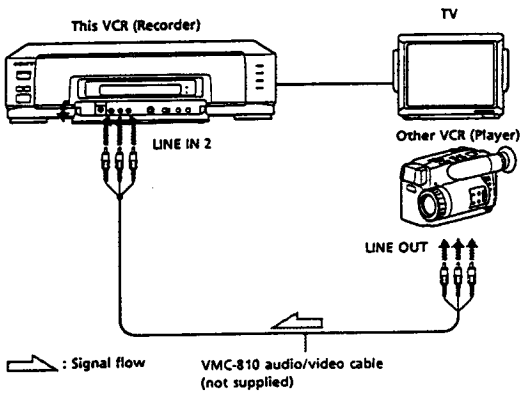
To stop assemble editing temporarily

Press SYNCHRO EDIT/START. When you restart assemble editing by pressing SYNCHRO EDIT/START again, editing starts from the first event.

Hooking up to a VCR without a LANC cable

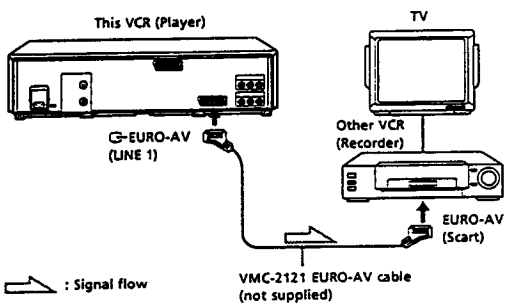
This section shows you how to edit to or from another VCR or camcorder which is not equipped with a LANC connector. You can make a copy of a tape using this VCR for recording or playback.

How to hook up to record on this VCR



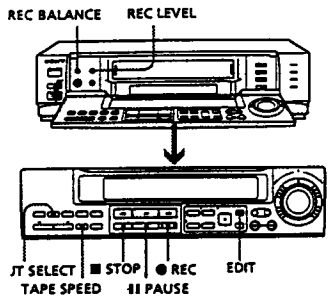
Tips
- Make sure you connect the plugs to jacks of the same colour.
- To connect the playback VCR, you can use the ⊖EURO-AV LINE IN 3 connector or the LINE IN 4 jacks as well. In this case, press INPUT SELECT to display "L3" or "L4" in the display window.
- If the other VCR is a monaural type and you connect it to the LINE IN 2 or LINE IN 4 jacks, leave the red plugs unconnected.

How to hook up to record on another VCR



Tips
- If the other VCR doesn't have a EURO-AV (Scart) connector, use the VMC-2106 EURO-AV cable instead and connect the cable to the line in jacks of the other VCR.
- To connect the recording VCR, you can use the LINE OUT 2 jacks as well.

Basic editing without a LANC connection



Making a copy of a tape

Before you start editing...
- Follow the instructions on page 57 to hook up your VCRs.
- Turn on your TV and tune in to the VCR.

On the playback VCR
- Switch on the EDIT mode if available.
- Turn off on-screen displays.
- When recording from a stereo/bilingual source tape, set the playback VCR to output both main and sub channels.

On this (recording) VCR
- Press EDIT to display "EDIT" in the display window.
- Press INPUT SELECT to display the addressed input in the display window.
- Set the REC LEVEL control on the VCR to 5 and the REC BALANCE control on the VCR to the centre.
- Press TAPE SPEED to select the recording tape speed (SP/LP).

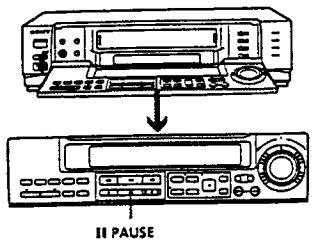
1 **Insert a source tape with its safety tab removed into the other (playback) VCR. Search for the point to start playback and set it to playback pause.**

2 **Insert a tape into this (recording) VCR. Search for the point to start recording and set it to playback pause.**

3 **Press ● REC on this VCR and set it to recording pause.**

4 **To start editing, press the II PAUSE buttons on both VCRs to release the VCRs from pause.**
For best results, press II PAUSE on this VCR before pressing the pause button on the other VCR.

To stop editing
Press the ■ STOP buttons on both VCRs.



Cutting out unwanted scenes

You can edit out unnecessary scenes while making a copy of a tape.

Before you start editing...
Prepare the playback VCR and this (recording) VCR following the instructions for "Making a copy of a tape" on page 58.

1 **Follow steps 1 to 4 on page 58 to start editing.**

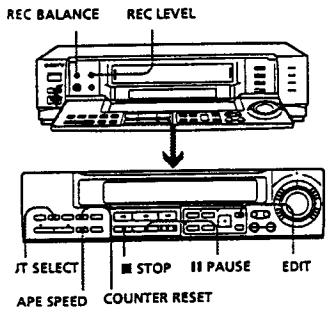
2 **When you come to a section that you want to leave out, press II PAUSE on this VCR.**

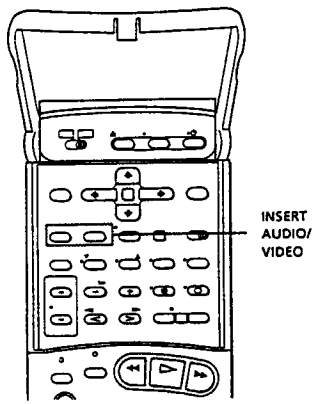
3 **Find the next starting point on the source tape and set the playback VCR to playback pause.**

4 **To resume editing, press the II PAUSE buttons on both VCRs.**

To stop editing
Press the ■ STOP buttons on both VCRs.

Insert editing without a LANC connection





You can replace unwanted scenes with other scenes by recording pictures and/or sound over the recorded tape.
There are three kinds of insert editing.

- A/V insert - all the original video, hi-fi sound, and the normal audio sound are replaced.
- Video insert - the original video and hi-fi sound are replaced. The original monaural sound is left intact.
- Audio insert - only the original normal audio sound is retained. The original video and hi-fi sound are left intact.

Before you start editing...

- Follow the instructions on page 57 to hook up your VCRs.
- Turn on your TV and tune in to the VCR.

On the playback VCR

- Switch on the EDIT mode if available.
- Turn off on-screen displays.
- When recording a stereo/bilingual source tape, set the playback VCR to output both main and sub channels.

On this (recording) VCR

- Press EDIT to display "EDIT" in the display window.
- Press INPUT SELECT to display the addressed input in the display window.
- Set the REC LEVEL control on the VCR to 5 and the REC BALANCE control on the VCR to the centre.
- Press TAPE SPEED to select the recording tape speed of the prerecorded tape.

1 **Insert a source tape into other (playback) VCR. Search for the point to start playback and set it to playback pause.**

2 **Insert the prerecorded tape into this (recording) VCR. Search for the end of the unwanted scene and set it to playback pause.**

3 **Press COUNTER RESET on this VCR to reset the counter to "0H00M00S".**

4 **Rewind the tape to the beginning of the unwanted scene and set this VCR to playback pause.**

Tip
- See "How sound is recorded on a video tape" on page 26.

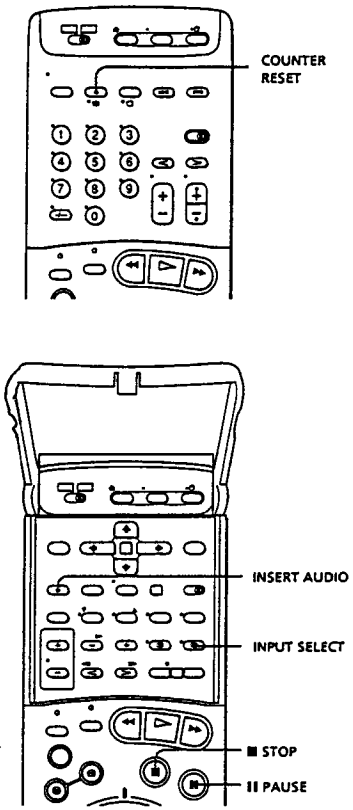
5 **Press the INSERT buttons according to the following:**

For	Press	So that
A/V insert	INSERT AUDIO, then INSERT VIDEO	the AUDIO INSERT and VIDEO INSERT indicators on the VCR light up and "AV INS" appears on the TV screen.
Video insert	INSERT VIDEO	the VIDEO INSERT indicator on the VCR lights up and "V INS" appears on the TV screen.
Audio insert	INSERT AUDIO	the AUDIO INSERT indicator on the VCR lights up and "A INS" appears on the TV screen.

6 **To start editing simultaneously press the II PAUSE buttons on this VCR and on the other VCR.**
When the counter of this VCR reaches "0H00M00S," editing stops automatically.

To stop editing
Press the ■ STOP buttons on both VCRs.

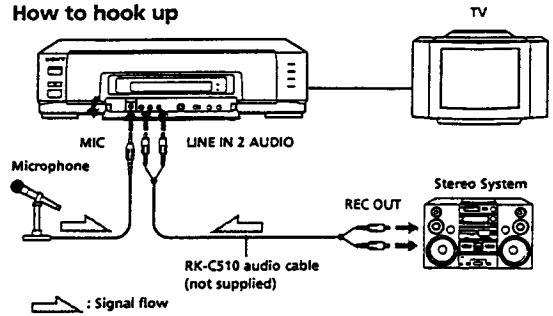
Audio dubbing for commentary and background music



Note
You must be in playback pause mode before pressing INSERT AUDIO. (If you are in recording pause mode, you cannot use the audio dubbing function.)

You can add music or narration on the normal audio track. The monaural sound previously recorded is replaced while the original picture and hi-fi sound on the main track are retained. (See page 26.)

How to hook up



Operation

Before you start ...
Press INPUT SELECT to display "L2" in the display window.

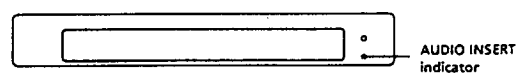
1 **Play a recording source. Search for the point to start playback and set it to playback pause.**

2 **Insert the prerecorded tape into this VCR. Search for the end of the section you want to dub new sound to and set it to playback pause.**
Make sure that the tape has its safety tab in place so that you can dub new sound onto it.

3 **Press COUNTER RESET on this VCR to reset the counter to "0H00M00S."**

4 **Rewind the tape to the beginning of the section and set this VCR to playback pause.**

5 **Press INSERT AUDIO.**
The AUDIO INSERT indicator lights on the VCR and "A INS" appears on the TV screen.



6 To start editing, press the II PAUSE button on this VCR and simultaneously press the II PAUSE button on the stereo system or speak into microphone.

When the counter of this VCR reaches "0H00M00S," audio dubbing stops automatically.

To stop editing

Press the ■ STOP buttons on this VCR and the stereo system.

Tips

- The sound from the LINE IN 2 AUDIO jacks and the MIC jack are mixed.
- For fade-in operation, turn the REC LEVEL control from the zero point to the normal position [5].
  For fade-out operation, turn it from the normal position to the zero point.

Note

- If AUDIO MIX remains ON, the AUDIO MONITOR button remains inoperative.

Listening to both audio tracks during playback

When playing an audio-dubbed tape, you have a choice of listening to either the prerecorded hi-fi audio or the inserted normal audio sounds using the AUDIO MONITOR button. To listen to the sounds recorded on the hi-fi audio and normal audio tracks at the same time, set AUDIO MIX to ON in the SET UP MENU. See page 53.

After playing the audio-dubbed tape, reset AUDIO MIX to OFF.